

DEAN MARTIN, STATE TREASURER

Arizona State Treasurer's Office (ASTO)

financial management system, general ledger and related information technology applications (FMS)

Request for Information

(RFI)

INSTRUCTIONS TO PROSPECTIVE OFFERORS

We request that Offerors' responses to the Request for Information (RFI) be submitted to by 3:00 p.m. MST, May 7, 2008. E-mail soft-copy and mail one-hard copy of all response files to:

Klint Tegland, Deputy Treasurer – Operations Office of the Arizona State Treasurer 1700 W. Washington 1st Floor Phoenix, Arizona 85007 Phone: (602) 604-7800

E-Mail: KlintT@aztreasury.gov

Questions regarding any aspect of this acquisition should be emailed to KlintT@aztreasury.gov. Questions and/or responses may be posted on the Arizona State Treasurer's Office (ASTO) website, http://www.aztreasury.gov/, at the ASTO's discretion. No pre-RFI conference is planned.

We request that all RFI responses be provided in the following two parts:

I. Cover Letter

The cover letter - include the following information:

- Company name
- Company point of contact with email address and telephone number
- Date submitted

II. RFI Questionnaire Response

Respond in the provided Question/Answer format for each question in the RFI Questionnaire section. The ASTO recognizes that potential responders may only have information pertaining to a portion of a FMS's goals but that this limited, "best of breed," information could still be of high quality and significant value to the ultimate common solution for the FMS. Therefore, while the ASTO seeks to define a common solution that addresses the entire FMS, it does not discourage partial responses. If you choose not to respond to a question, indicate "no response" and identify the rationale.

We suggest you limit your response to be no more than 100 total single-sided pages with print no smaller than 12 point. We request that you provide sufficient detail and clarity to assist our assessing your solution approach. All additional marketing material and reference material may be placed in appendices. Please respond electronically in Microsoft Word 2003 (or excel) or later. Marketing materials may be provided in PDF format.

INTRODUCTION

The ASTO seeks information related to internal business consolidation efforts. The objective of this initiative is to establish common solution and target architecture approaches that identify systems, best practices, migration strategies and key interfaces to develop common business process and system solutions. The current system is a "home grown" application developed in Microsoft Visual FoxPro.

This is a RFI issued solely for information and planning purposes. This document does not constitute a Request for Proposal (RFP). The FMS Task Force intends to assess the capabilities and issue a RFP at a later date. Responses to this RFI will not affect a potential offeror's ability to respond to any RFP that might follow. Acquisition is currently planned to begin in FY 2009. The ASTO seeks to implement such a system to facilitate its banking and financial management functions. The system described as FMS will provide such capability.

Please ensure that any sensitive or protected information is marked as such. All information submitted shall become the property of the ASTO and is subject to the public disclosure laws of the state of Arizona. All submitted information not marked as sensitive or proprietary will be available for public review upon request.

MANAGEMENT SUMMARY

The State Treasurer serves as the Chief Financial Officer for the State of Arizona, overseeing nearly \$12.7 billion in assets under management. The Treasurer is responsible for the prudent custody and management of Arizona tax dollars.

The State Treasurer is the trustee and manages nearly \$2.6 billion of investments for the Arizona State Land Endowment Trust. There are 13 different investment pools for the endowment; the largest is the Public Common School Fund benefiting education. Millions of dollars each year are distributed directly to classrooms around Arizona as a result of our investments.

Overview

The State Treasurer also provides investment services to local governments (counties, cities, towns, etc). Local governments may use the State Treasurer as an investment manager. By pooling their deposits with the State Treasurer, we can earn higher returns for both the State and local governments. We also provide same-day liquidity, and save local governments the cost of operating a duplicate trading room and investment accounting operation. Currently, we manage nearly \$5.4 billion for local governments in Arizona.

The Treasurer's office has three separate accounting divisions to track deposits, investments, transfers, and distributions. The Treasurer's office also has audit authority over all state finances. Every dollar deposited earns investment income; revenue from non-interest earning eligible accounts is deposited in the General Fund.

The Treasurer is the bank for state government. We reconcile approximately \$300 million dollars of transactions each day (credits and debits). Our office pays all warrants for the State of Arizona, as well as wire transfers. We manage the state's cash flow and daily forecast future cash needs. We also contract with armored car service to pick up deposits directly from state agencies and branch offices across Arizona so that tax money is deposited, invested, and earning interest the same day.

The ASTO is looking to improve its operating efficiency by continuing to streamline policies and procedures, upgrading its technology and communication systems, and assuring adequate levels and allocation of human resources to be able to meet growing demands for its services.

STRATEGIC ISSUES

Strategic Issue 1 – Efficient Delivery of Services

Current ASTO procedures for financial management services and related information technology (IT) applications (FMS) generally are labor-intensive and aging. To the extent possible under statute, and with respect for the legal requirements to ensure due process, the ASTO will identify and implement ways to streamline and simplify these operational processes to serve the ASTO sister government entities and the public in a timelier manner.

Strategic Issue 2 – Technology Resources

Based on the ASTO's recently completed business technology assessment, the ASTO will develop an implementation plan to replace its existing information technology (IT) systems, additionally providing opportunities for re-engineering appropriate business processes throughout all areas of the ASTO. Implementation and integration of these systems will provide faster, more efficient customer service to government entities, and the public, as well as enhance staff efficiency by reducing duplication of effort and shortening time spent on various data-gathering, operational and verification tasks.

Strategic Issue 3 – Business Continuity Plan

In the event of emergency or disaster conditions resulting from natural, technological, or human-caused conditions, it is likely that the recovery period will involve a significant response effort. It is therefore critical that the ASTO review, update, and continue to maintain its Business Continuity Plan (BCP) to ensure that it will facilitate that effort, including having the appropriate technology to ensure that ASTO employees will be able to work, communicate with individuals inside and outside the ASTO, and access ASTO data from a variety of alternative remote locations.

PURPOSE

The purpose of this RFI is to provide industry service providers with a vehicle to describe solutions and implementation approaches for achieving the goals of the three strategic

issues (as indicated above) through delivery of industry-standard solutions that are compliant with Arizona target architectures. This will enable the ASTO and its partners to incorporate strategies, alternatives, and experiences, representing best practices in developing and implementing transformational common solutions and a target enterprise architecture, into implementation strategies for the FMS. The ultimate goal is to develop and implement common solutions for the ASTO that provides capabilities that achieve the FMS objectives.

The intent for the RFI response is to:

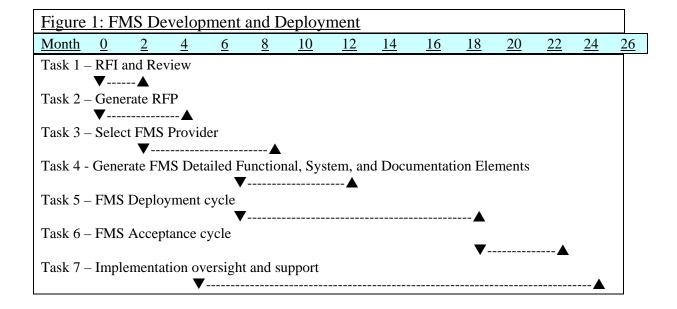
- Identify solutions that address FMS vision and goals.
- Be structured so that its results can be used to develop the FMS common solution and target architecture.

SCOPE

The RFI solicits information regarding the Common Solution and Target Architecture for each of the following business areas:

- Strategic Issue 1 Efficient Delivery of Services,
- Strategic Issue 2 Technology Resources, and
- Strategic Issue 3 Business Continuity Plan.

The FMS Task Force (composed of ASTO and participating ASTO partners) intends to identify a common solution, develop target architecture, and develop an implementation strategy by September 2008. The high-level timeline, illustrated in Figure 1, provides the context of this RFI activity.



BACKGROUND

The FMS Task Force is focused on a business-driven, common solution and target architecture developed through architectural processes. The definitions of these key characteristics of the FMS approach include:

- Common Solution End-to-end shared service capabilities needed to achieve the FMS Statement of Objectives through a Target Architecture that includes business process, technology solutions, and data standardization.
- *Target Architecture* End state toward which all efforts are directed; it is the architecture which integration efforts will be directed.
- Business Driven (vs. Technology Driven) Solutions address distinct business improvements that directly impact FMS performance goals.
- Developed Through Architectural Processes Solutions are developed through a set of common and repeatable processes and tools with a growing future emphasis on service oriented architecture.

Refer to the State of Arizona, GITA Policy P-100 (http://azgita.gov/policies_standards/html/p100_information_technology_policy.htm) for additional background information, references and a glossary with acronyms and terms used in this RFI.

FMS STATEMENT OF OBJECTIVES (SOO)

Strategic Issue #1- Efficient Delivery of Services

To the extent possible under statute, and with respect for the legal requirements to ensure due process, the ASTO will identify and implement ways to streamline and simplify operational processes for financial services relating to custody, management and investment services for Arizona government entities and citizens in a timelier manner.

Goal

Maintain high level and quality of service for financial services relating to custody, management and investment services, for Arizona government entities and citizens, in the face of increased demand.

Performance Measures

- Decreased start-to-finish times for processing and tracking of operational processes of financial services provided to Arizona government entities and citizens.
- 2. Increase in efficiency in the investment of Arizona government entity resources by ASTO.

3. Increase in Arizona government entity usage of online services provided by ASTO.

Strategies

- 1. Expand and complete the re-thinking of major business processes, as they are impacted by the next generation of automation.
- 2. Assess the ASTO's organization structure with regard to alignment of operational processes of financial services relating to custody, management and investment services for Arizona government entities and citizens particularly with regard to empowering ASTO personnel by both providing them with more data and enabling them to react quickly and precisely to their customer needs.
- 3. Survey Arizona government entities and citizens to evaluate the ASTO's performance and provide input for better customer service.

Strategic Issue #2 – Update Technology Resources

Based on the ASTO's recently completed business technology assessment, the ASTO will develop an implementation plan to replace its financial management system.

The financial management system upgrade is necessary to migrate ASTO's data system from its current, internally developed, financial management environment to a state-of-the-art relational model that facilitates the generation of complex reports, the sharing of data with ASTO customers through use of Services Oriented Architecture constructs, and streamlined operational processes. Implementation and integration of these systems will provide faster, more efficient customer service, as well as enhance ASTO staff efficiency by reducing duplication of effort and shortening time spent on various data-gathering, processing and verification tasks.

It is important to note that the technology will not dictate the manner in which the ASTO business is conducted. However, to most effectively fulfill the ASTO's business objectives in light of the technology directions being considered, all business processes are open for re-examination.

Goal

Improve internal operational efficiency; enable timely generation of reports, electronic sharing of data, and exchange of information with other Arizona public-sector entities; support the ASTO's Disaster Recovery Planning for the IT portion of the Business Continuity Plan; and serve the public in a timely and professional manner.

Performance Measures

1. Physical and/or functional replacement of existing financial management system hardware/software.

- 2. Reduced time spent on repetitive and/or manual tasks in the financial management system processes.
- 3. Reduction of labor-intensive operations typically required for the existing financial management system to generate reports or share data and provide related services to ASTO customers.

Strategies

- 1. Adopt a new financial management system enabling IT architectural alignment, integration with newer technologies and applications, and timely professional service delivery of ASTO services to Arizona government entities and citizens.
- 2. Plan for eventual out-tasking of system maintenance, wherever practicable, to ensure that responsibilities are handled by the most experienced, best qualified people without being subject to the personnel turnover particularly common in the technology industry.
- 3. Adopt and deploy appropriate Internet-centric outlets providing direct online access to the ASTO's services and information, in order to extend Internet-based online customer services.

The objective of this ASTO technology update project is to address the critical need for the ASTO to advance its ability to efficiently manage its daily activities through the use of automation that will enable ASTO to move toward a comprehensive, integrated paperless system with distributed results reporting, thereby strengthening the foundation of the ASTO's ability to serve its Arizona stakeholders.

The proposed system is a comprehensive; vendor developed and supported financial management system that will meet the needs of the ASTO within the Arizona Enterprise Architecture framework. ASTO will decrease reliance on paper-based procedures to perform core business functions. ASTO will also focus to deployment of multi-channel user-access interfaces, accessing and updating a central database as the primary means for obtaining and conveying critical information to our stakeholders.

Strategic Issue #3 -Business Continuity Plan

In the event of emergency or disaster conditions resulting from natural, technological, or human-caused conditions, it is likely that the recovery period will involve a massive effort to construct and rehabilitate buildings and infrastructure. It is therefore critical that the ASTO review, update, and continue to maintain its Business Continuity Plan (BCP) to ensure that it will facilitate that effort, including having the appropriate technology to ensure that ASTO employees will be able to work and communicate with individuals inside and outside the ASTO, and access ASTO data from a variety of alternate remote locations if necessary.

Goal

In case of emergency or disaster conditions, limit injuries to staff, provide responsive financial resources and guidance to ASTO customers, and restore resources and services necessary to operate the ASTO's critical, essential, and administrative business functions provided to Arizona government entities and the public.

Performance Measures

- 1. Preparation of Emergency Response and Evacuation Plans and Test Schedule.
- 2. Testing of the plan.

Strategies

- 1. Review the ASTO's current BCP for adherence to ADEM (AZ Division of Emergency Management) guidelines and inclusion of required elements such as an introduction, basic plan, and functional annexes and revise as necessary.
- 2. Monitor and document progress in addressing the ASTO's strategic issue of technology resources and the impact on Disaster Recovery Planning (DRP) for Information Technology.
- 3. Enhance the ASTO's technology for remote access, a critical factor during the recovery phase because it allows staff to work from any location.
- 4. Establish a process-oriented approach to business continuity that includes: business impact analysis; risk assessment; risk management; and risk monitoring.

Existing Financial Management System Structure and Implementation

The existing ASTO financial management system structure is provided, in block-diagram form, in Appendix A.

MAJOR OUTCOMES

FMS desires to provide these deliverables:

• Arizona Government Entities and Citizens

- Self-serve user enablement to both obtain information from and provide information to ASTO
- o More complete and timely financial status information
- o Faster receipt and tracking of funds
- o More timely and accurate records and results reporting
- o Improved efficiencies of processes.

ASTO staff

- o General improvement in availability of decision-making data
- Substantially reduced data entry activities and in particular the elimination of multiple inputs

- o More flexible, efficient, and intuitive process for report generation
- o More features and functionality to minimize manual processes
- o Consistency of ASTO inputting and reporting requirements
- o Improved ability to share data through advanced technologies
- o Survivable data system that is highly available even during severe events or conditions.

The following metrics will be used to determine FMS success:

- Increased accountability to ASTO customers
- Increased ASTO efficiency and effectiveness
- Increased stakeholder responsiveness
- Regulatory requirements are satisfied.

RFI QUESTIONNAIRE

1.1. SOLUTION AND APPROACH

1. To which ASTO Strategic Issues does this response apply? (check all that apply)

Strategic Issue 1 – Efficient Delivery of Services	Strategic Issue 2 – Technology Resources	Strategic Issue 3 – Business Continuity Plan

2. Which operating model(s) best describe your recommended approach?

X	Operating Model
	Individual government entity operates solution(s) in government environment
	Multiple government entities operate solution(s) in government environment
	(cross-entity service providers)
	Government entity out sources services independently (individual buying)
	Government entities outsource services independently (bulk buying)
	Government entities outsource services as groups (consolidated solution)
	Other (specify)

- Why will the selected model(s) yield better value for the ASTO than the other models? Provide pricing or benchmark cost information if possible.
- How does the solution allow the ASTO to benefit from competition in the marketplace?
- What types of economies of scale will be provided by the solution? At what point (size of operations) will the economies of scale begin? Is there a point beyond which there are no further economies of scale (i.e., no further gains or risks outweigh gains)?
- Is a particular operating model or combination of operating models required to achieve economies of scale?

- 3. Describe (and graphically depict as needed) the common solution, target architecture and implementation approach (herein referred to as your recommended "solution" or "approach") using the EA Reference model taxonomy illustrated below. Include performance, business, service, data and technical layers. (See Arizona State Enterprise Architecture as described in Arizona Statewide Policy P700 and Software Architecture Policy P730 (http://azgita.gov/policies) and shall specifically adhere to the requirements of the Arizona Enterprise Architecture Target Technology Table (http://azgita.gov/enterprise_architecture/AZ_EA_Target_Technology_Table.htm).).
 - a) How does your recommended solution map to the GITA Enterprise Architecture (EA) Reference Models?
 - Describe the measurement areas and their associated categories that are addressed by your recommended solution. Please provide a rationale.
 - Describe the sub-functions that are addressed by your recommended solution.
 Please provide a rationale.
 - Describe the components that your recommended solution will use to address the sub-functions. Please provide a rationale.
 - Please describe EA standards that are specific to your recommended solution.
 Please provide a rationale.
 - Describe approach for implementation of the FMS architecture within the context of the EA Reference Models.
 - How does your recommended solution propose to provide breakthrough performance with regard to the EA?
 - Describe a conceptual view of the business objects that are created, used, read, or eliminated as part of the solution. Please provide a rationale.
 - Organize the response to these questions at the owner and planner view utilizing the set of perspectives as described below:
 - Planners view: Business Objects and their interactions.
 - Owners view: Graphically depict the inter-relationships between the elements described in the Planners view (i.e. which business objects are enabled by which EA components). Graphically depict the role of technology standards in supporting the elements described within the planners view.
 - Please provide any reference architectures relevant to your recommended FMS solution addressed in this response.
 - b) Address the following business process/change management-related questions:
 - What major process simplification/reengineering/design projects are recommended?
 - What major organization restructuring/training/change management projects are recommended?
 - With what business process and/or organizations will the proposed solution interface? Identify the business interactions between and within the FMS.
 - Please describe the respondent's approach to interpreting, translating and integrating disparate business rules and processes within the FMS.

- Describe what the FMS will be like at some future date (e.g., in 5-years) and what kind of services would be provided in an information rich, service environment.
- c) Address the following systems-related questions (including Appendix B):
 - What strategy would the solution use to determine and evaluate existing opportunities for reuse / sharing across the FMS (with a particular focus on financial management and human resources)?
 - Describe the approach to using Commercial-Off-The-Shelf (COTS), and/or custom-designed products. Explain the rationale for this decision and list any products that are part of the solution. Describe how the solution makes use of "open" standards. Describe how the solution envisions the development of an architecture that makes use of multiple vendor packages and is vendor neutral in nature.
 - Do the applications, hardware, software, and infrastructure that are components of your solution and approach currently exist? Are they operational and proven? (*Please detail your solution relative to the question set in Appendix B and include in your submittal*)
 - Describe the capacity and scalability of the hardware and infrastructure components required to support the solution and approach.
 - Describe the approach for interfacing/integrating with other applications. List all other applications that interface with the solution. Would these interfaces require any reengineering as part of the solution and approach?
 - Please describe the respondent's approach to interpreting, translating and integrating the various data types found within the FMS.
 - What types of data, data standards, and data exchange mechanisms will be used in the solution?
 - What is the approach to data conversion and data quality?
 - What application, hardware, and innovations do you see in the near future that will address the FMS Statement of Objectives?
 - Describe approach to managing technological changes. Describe approach to technology evaluation and integrating new and evolving technologies.
- 4. What assumptions are made about the solution and approach? Please provide this response in the following format:

Category	Assumptions
Business	Bulleted list
Technology	Bulleted list
Resources (Financial, Skill Mix, Level of	Bulleted list
Effort, Time, etc.)	
Organizational & Change Management	Bulleted list
Customer/Community Impacts	Bulleted list
Others (specify)	Bulleted list

5. Describe risks **inherent to the ASTO's achieving its objectives** and how the solution and approach for delivery addresses those risks. Please classify the likelihood (i.e., chance of occurrence) and impact of risks (H=High, M=Medium, L=Low) and include mitigation strategies in the following format:

Risk	Likelihood (H, M, L)	Impact (H, M, L)	Mitigation Strategy
Business			
Technology			
Strategic			
Cost (Initial & Life-			
Cycle)			
Project Resources			
Schedule			
Organizational &			
Change Management			
Data/Information			
Privacy			
Security			
Customer/ Community			
Others (specify)			

6. What are the risks **associated with the solution and the approach for mitigating them?** Please classify likelihood and impact of risks (H=High, M=Medium, L=Low) and include mitigation strategies in the following format:

Risk	Likelihood (H, M, L)	Impact (H, M, L)	Mitigation Strategy

- 7. How does the solution and approach support the ASTO's Statement of Objectives (SOO)? If the solution and approach does NOT fully support the ASTO's stated SOO, explain the differences and the rationale(s) for those differences.
- 8. How does the solution and approach support the ASTO's general requirements? If the solution and approach does NOT fully support the ASTO general requirements, explain the differences and the rationale(s) for those differences.
- 9. Describe the success encountered in previous development and implementations of the solution and approach.
- 10. For examples provided in response to question #8, please provide customer information (where available) in the following format:

Item	

Item	

- 11. Explain what would have been done differently based upon challenges encountered in previous implementations of the solution and approach.
- 12. Who are the customers for this solution and how will the solution improve service to the customer, reduce/avoid costs, and/or improve efficiencies? What is the timeframe in which service to the customer will be improved, costs reduced/avoided, and efficiencies improved?
- 13. Are there short-term versus long-term trade-offs inherent in the solution and approach?
- 14. How will migration from existing platforms to the solution be achieved, including the migration of business processes and data standards?
- 15. Identify barriers to migration to the solution and describe the approach to overcoming those barriers.
- 16. Discuss the approach to encourage usage and promote adoption of the solution.
- 17. Describe any alternative solutions and/or approaches considered and why they were rejected.

1.2. ACQUISITION STRATEGY

- 1. What are the impacts to the solution and approach if a performance-based/share-in-savings contracting approach is pursued?
- 2. Describe success and challenges encountered in previous uses of performance-based/share-in-savings contracts. What are the expectations in terms of incentive/disincentive provisions? For instance, what incentives/disincentives motivate industry?
- 3. What are the impacts to the solution and approach if a firm-fixed price contracting approach is pursued?

1.3. IMPLEMENTATION DETAILS

1.3.1 Program Management

- 1. Describe the program management approach to providing the solution.
- 2. Describe the team structure and skill mix required to execute the proposed approach. Include both governmental and non-governmental resources (indicate any small business participation). Address compliance with security requirements for personnel executing the approach.

1.3.2 Cost & Timeline

- 1. What are the high-level cost estimates for the solution and approach? Cite previous experience and related benchmarks if possible.
- 2. Provide a high-level timeline for the solution and approach. Cite previous experience and related benchmarks if possible.

1.4. Performance Metrics

- 1. What is the approach to performance management?
- 2. Based on the solution and approach, what performance metrics are recommended? Please provide responses for the following categories:

Category	Category Description	Objective – Performance Metrics
Mission and	These objectives are focused on how	
Business Result	the ASTO solution will deliver value	
Objectives	to the citizens and stakeholders who	
	benefit from the programs supported	
	by the ASTO solution. These	
	objectives include: improved program	
	effectiveness, improved	
	responsiveness and quality of program	
	services, increased program capacity	
	and increased program efficiency.	
Customer	These objectives are focused on how	
Objectives	the FMS solution will satisfy the users.	
Process	These objectives focus on improving	
Objectives	the operations of the processes	
	supported by the ASTO, such as	
	improving the management of	
	regulatory/legislative changes, or	
	improving customer/ASTO client	
	management.	
Financial	These objectives are focused on the	
Objectives	efficiency and cost-effectiveness of the	
	specific functions being addressed by	

Category	Category Description	Objective – Performance Metrics
	the ASTO.	
Other		
Objectives?		

1.5. SECURITY AND PRIVACY

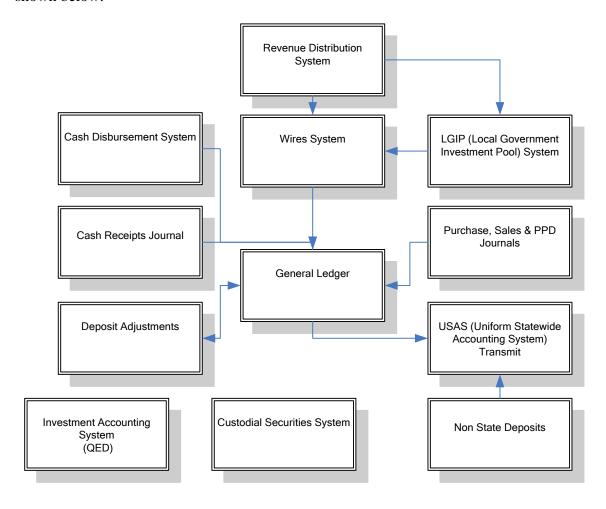
- 1. How does the solution and approach meet government security requirements?
- 2. How does the solution ensure requisite confidentiality, integrity, availability, auditability and privacy?
- 3. How will the effective use of security controls and authentication tools protect privacy for those systems that promote or permit public access be ensured?
- 4. Describe the approach for handling personal information consistent with relevant government-wide and ASTO policies.
- 5. How will data privacy and security issues, to gain access to that data, be addressed?
- 6. Describe the approach for providing communications and database security. What tools and techniques will be used to support this?

Appendices

A. ASTO current financial management automation Maps

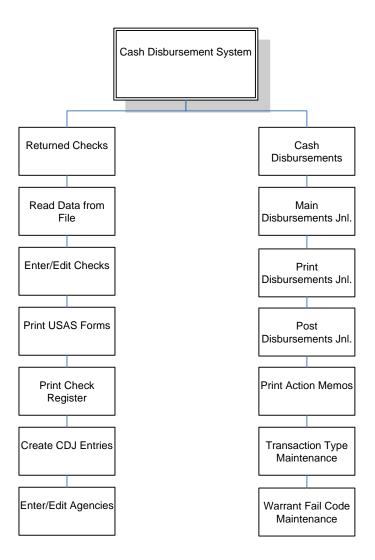
1. Overview Diagram

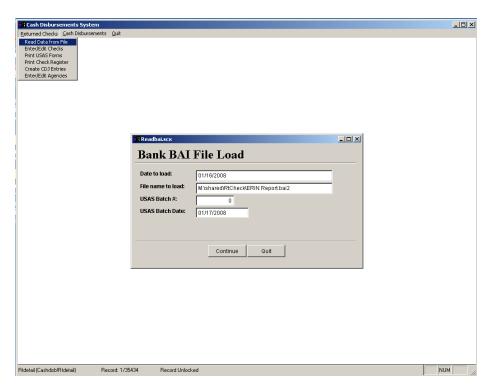
The overview diagram of the current ASTO financial management automation system is shown below.



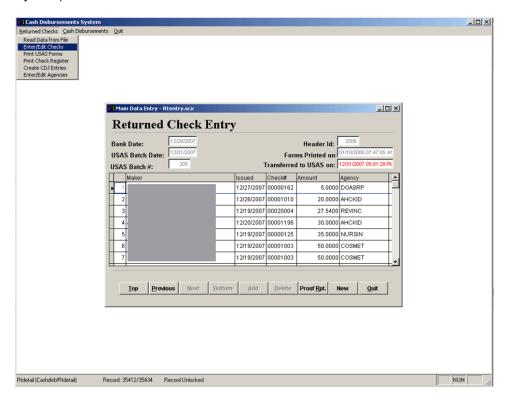
2. Constituent Diagrams

Constituent diagrams of the current ASTO financial management automation system are in the following pages. Descriptions (if applicable) are located below the screen shots and may continue on the page immediately following.

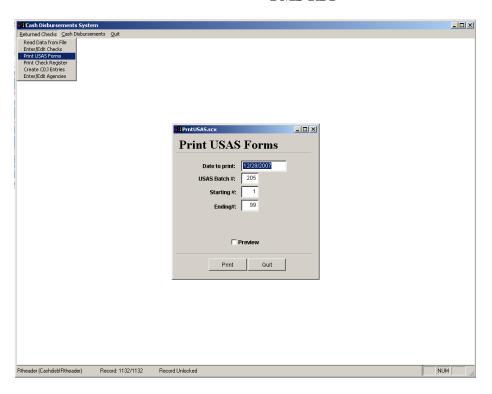




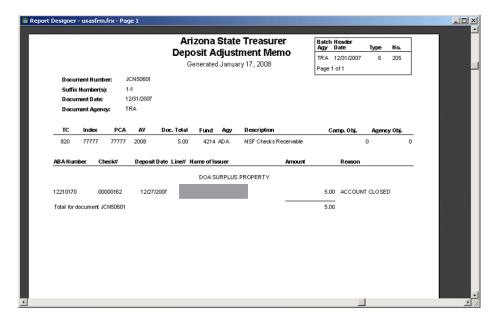
Load returned items from Servicing Bank as well as assign USAS (Uniform Statewide Accounting System) batch number and date to the file.



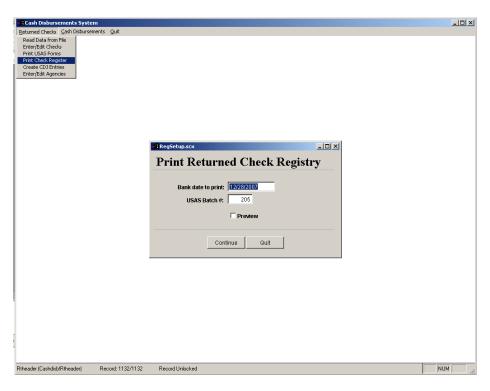
Verify information and assign debt to an agency through a code, (short name) that has an accounting string profile in USAS.



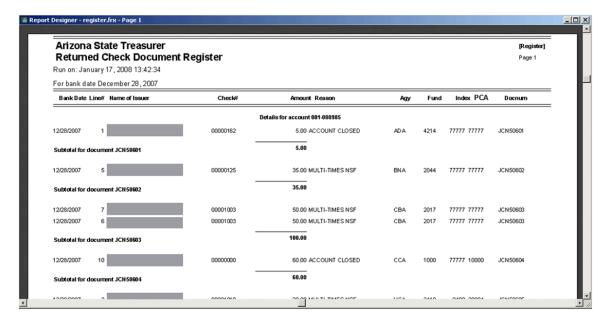
Assign document number to each item. Perform calculation to confirm totals between bank load and created documents. Print USAS documents.



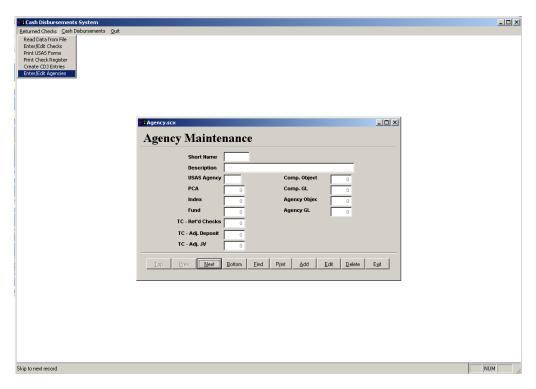
Printed USAS document that returned items are attached to. Verification of USAS accounting string that debt is charging.



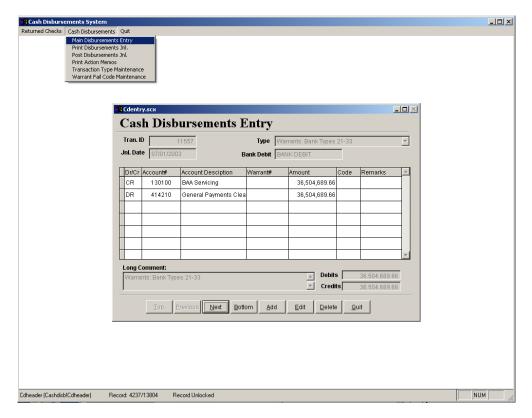
Use as verification, backup and batched information transmitted to USAS.



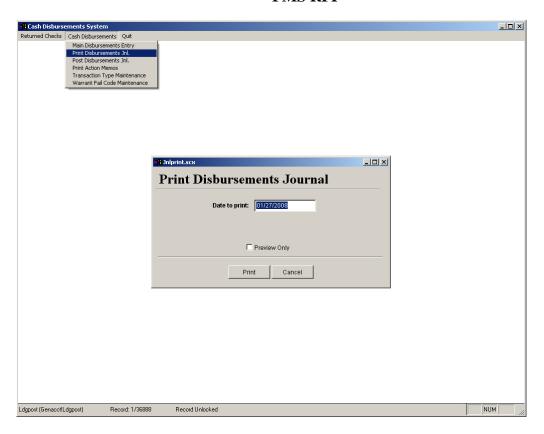
Used as backup batched information, verification of recap totals at the end of the document.

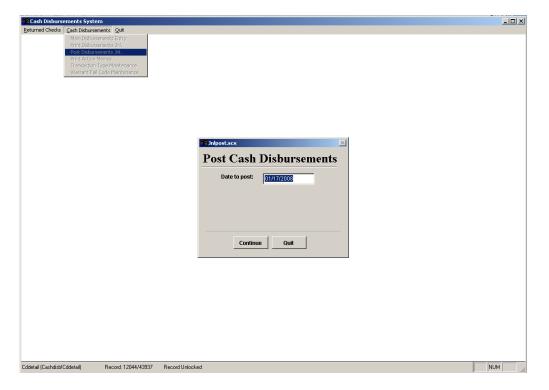


Assign USAS accounting string to a code, "short name".

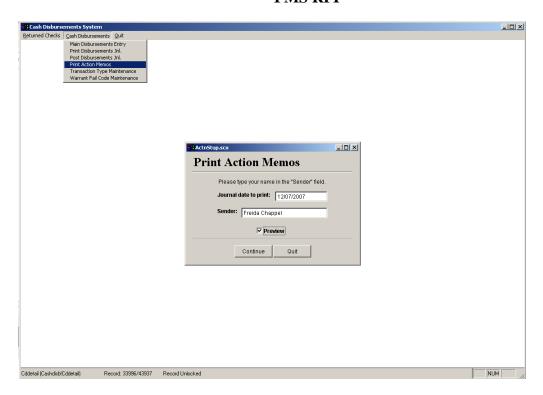


Create a cash disbursement entry for authorized outbound monies.

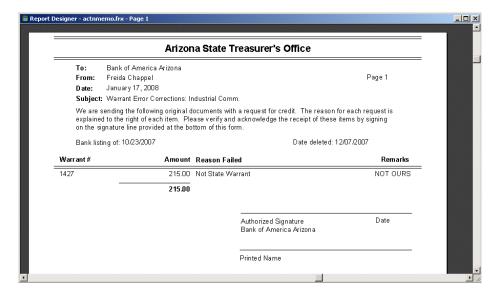




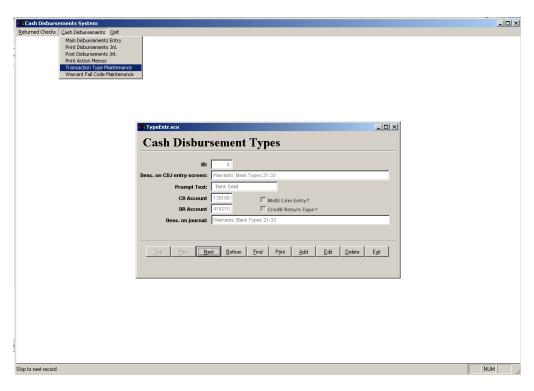
Post cash disbursement entries to the general ledger.



Print document for reimbursement for daily warrant corrections to Servicing Bank. Provides sufficient data in order for Servicing Bank to pull and rerun warrant.



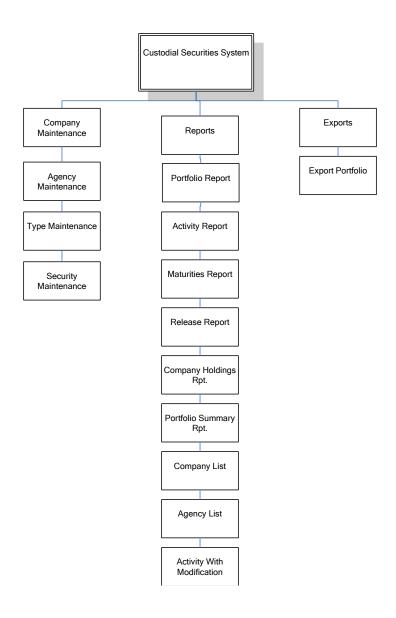
Print document for reimbursement from Servicing Bank

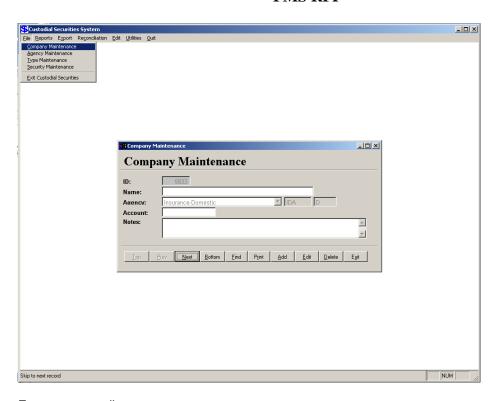


Assign a set string of cash disbursement entries based on description chosen.

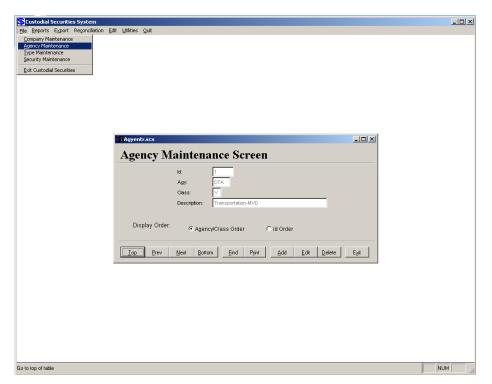


Assign a code to a description that would shorten key entry as well as set a standard description based on action and not user.

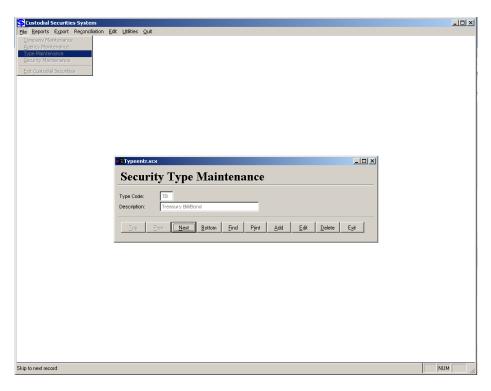




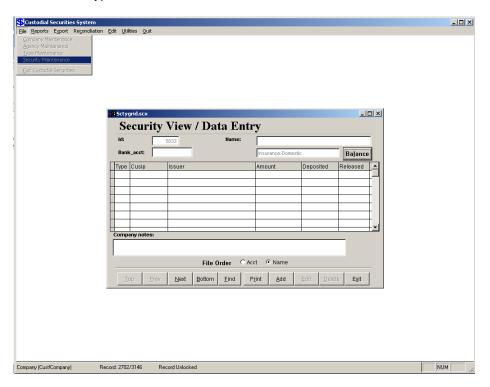
Enter new or edit company name.



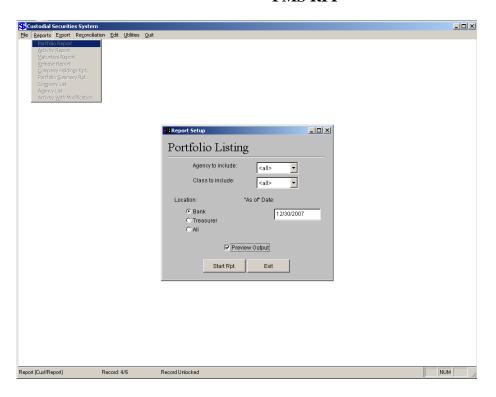
Enter new or edit agency information.

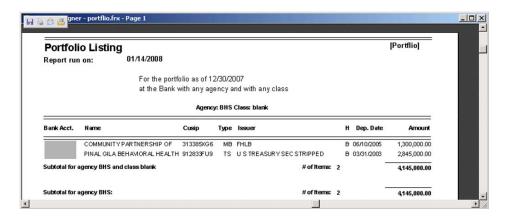


Enter or edit types of securities held.

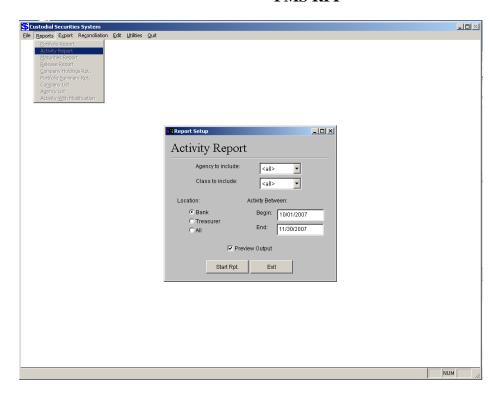


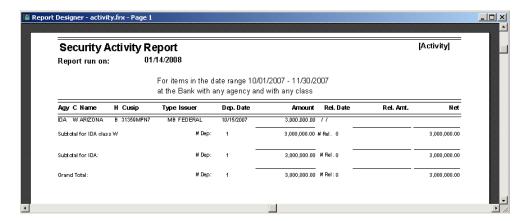
Enter security held data. Release securities or make changes to securities.



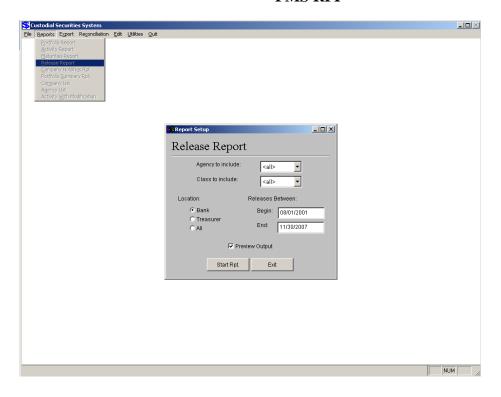


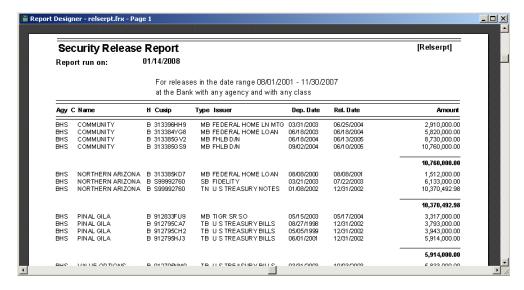
This report is used to reconcile to CD/Letters of Credit held in vault.



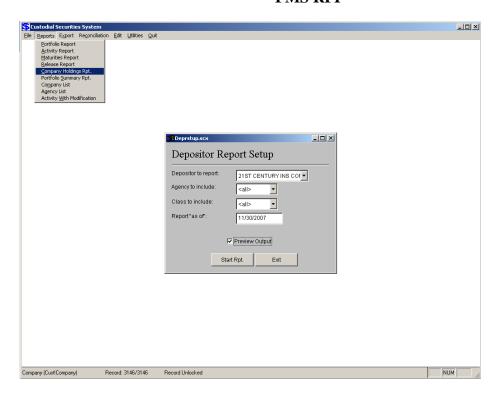


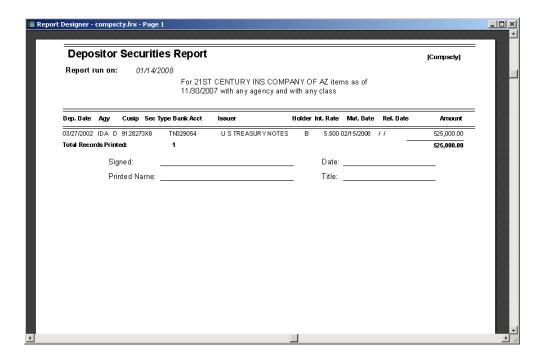
This report shows the activity for specified time period for any agency sorted by company.



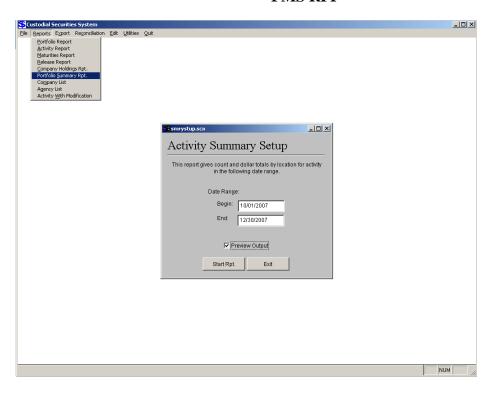


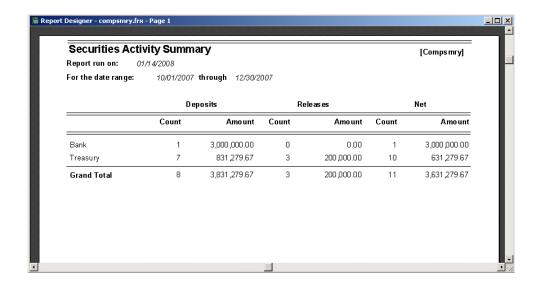
Report shows securities released sorted by state agency and company held for.

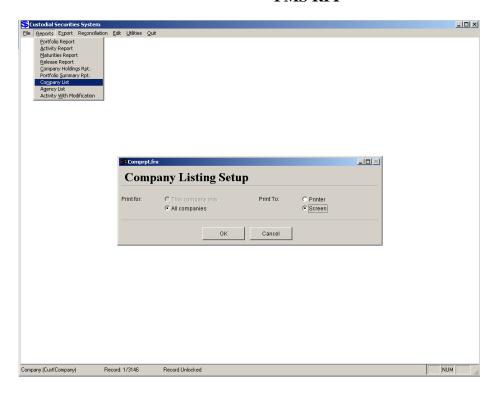


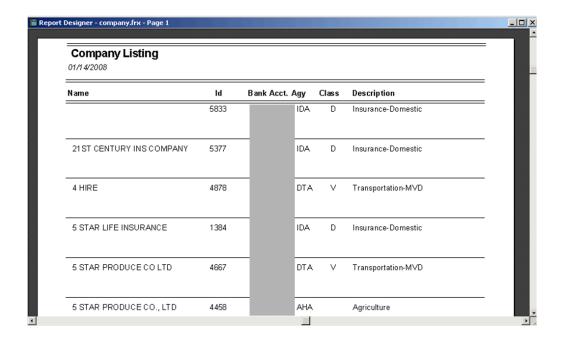


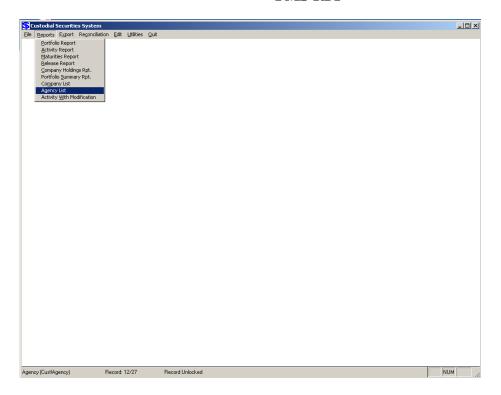
Company list used for audit requests.

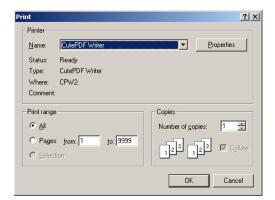




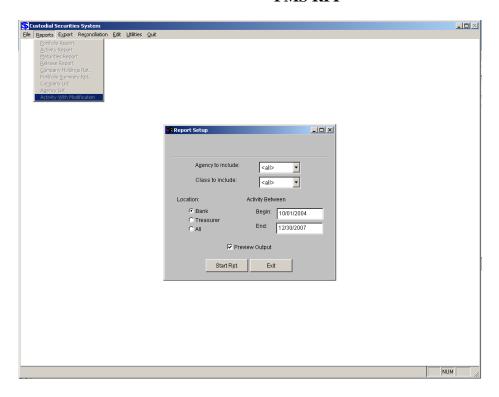


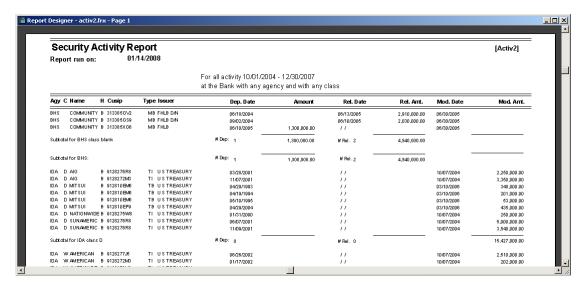




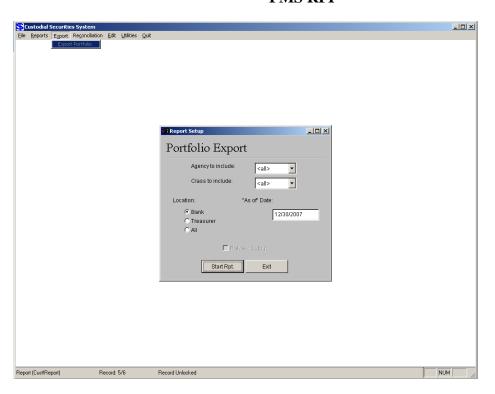


Launches Printer



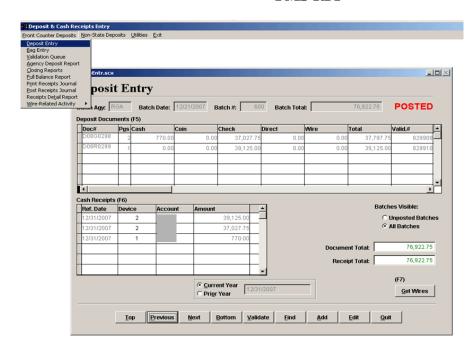


Activity report by agency, by company listing securities held or released during specified time period.

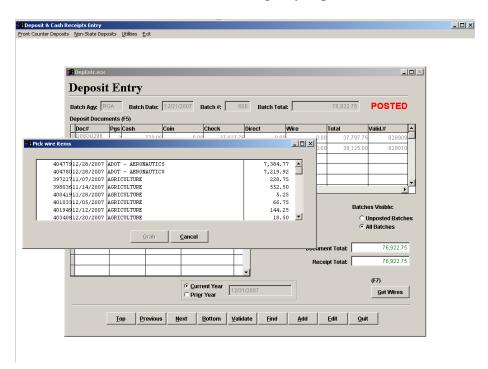


Creates .txt file

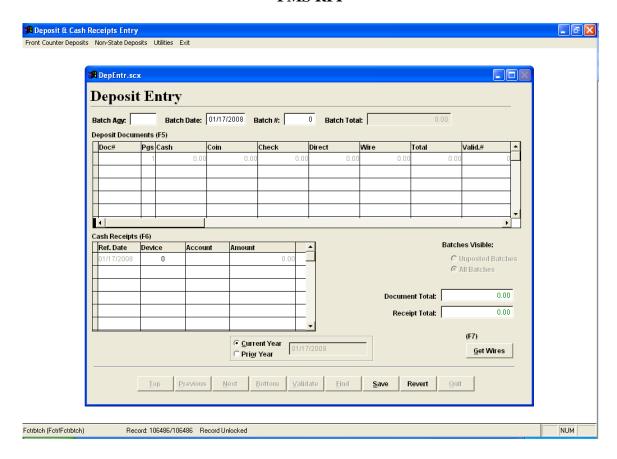
Arizona State Treasurer's Office FMS RFI Deposit System Front Counter Non-State Deposits Utilities Deposits Delete a Front Deposit Entry Batch Entry Counter Deposit Fee Maintenance Bag Entry Validation Queue Fax Contact Maintenance Agency Deposit Depositor Réport Maintenance Spreadsheet & Gen Closing Reports Reports Full Balance Report NSD History Ad Hoc Reports Print Receipts Adjustments & Transfers Journal Post Receipts Journal Wires Accepted Report Receipts Detail Report Wire-Related Free a Wire Activity



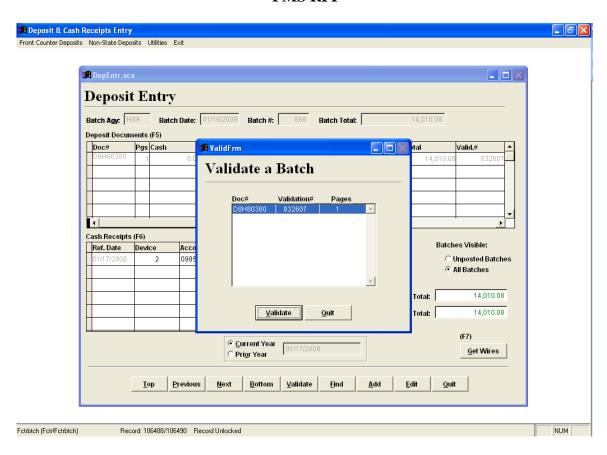
Top ½ of screen is used to input information from GAO 505/605 provided by agency. Bottom ½ of screen is used to input the breakdown of cash, check, direct deposit or wire amounts received associated with the agency deposit.



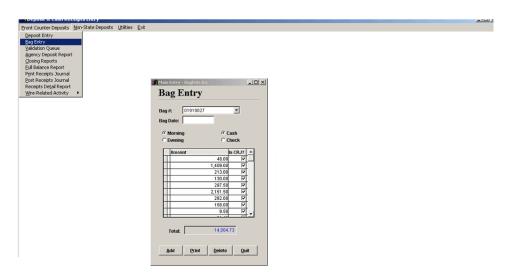
Wire items are from list that is maintained by wire desk.



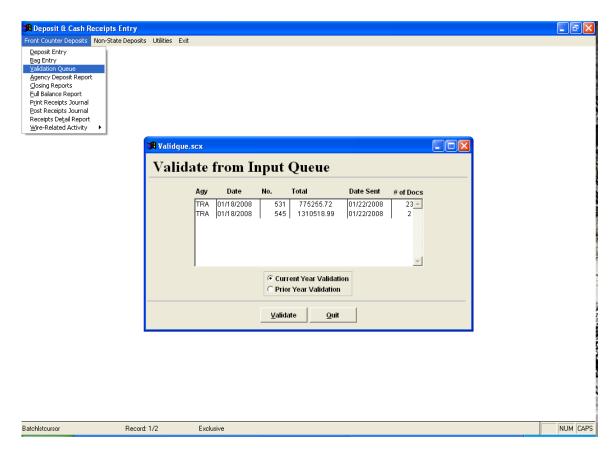
Once the Document Total and Receipt Total balance; "Save". This brings up the validation screen shown below.



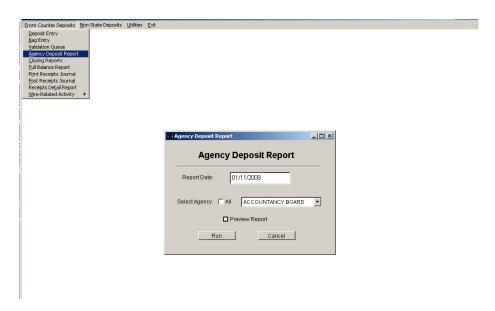
Validate key causes the validation printer to print a unique sequential validation number onto the GAO-505/605 brought by the agency.



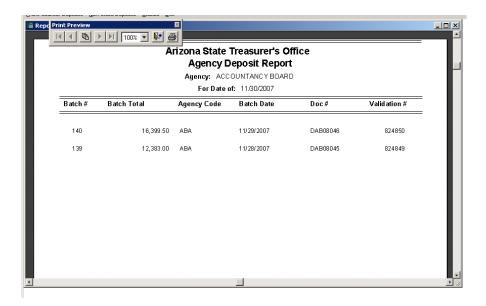
Used to record pre-numbered bank bags and the individual checks and cash amounts in them. (Cash and checks are bagged separate). The system verifies (by placing a check mark in the box) that the amount was input into the "receipts" section of the deposit entry screen.



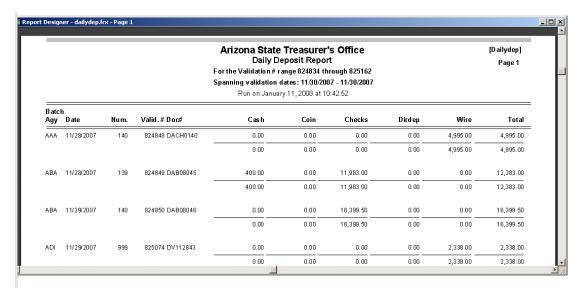
Shows batch header for validated batches. This is used to re-print validation. Also used for research, looking up agency information by validation number.



Report can be run on specific agency or for all agencies for a specified date to show the information for that date.

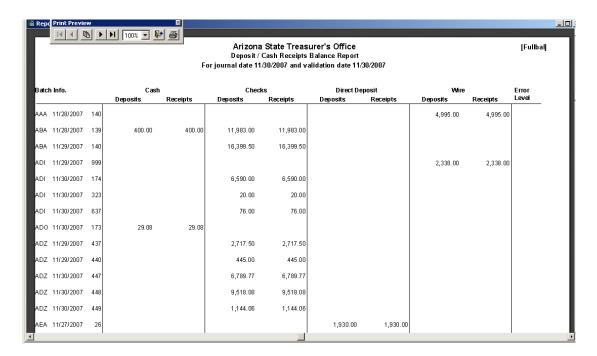




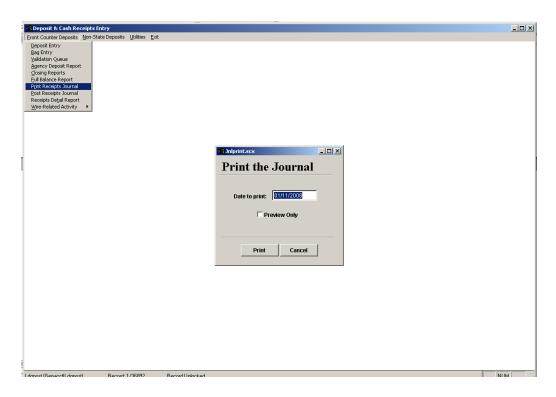


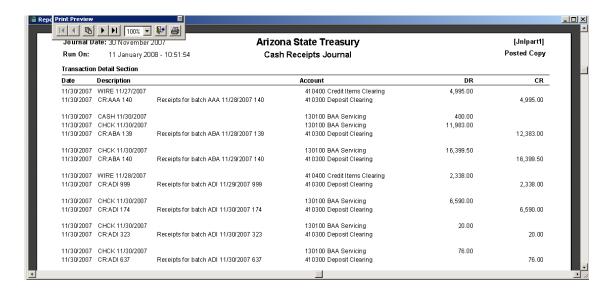
Report shows the days deposits processed in alphabetic order by agency. Copy is kept with day's work. It is an easy report to check for a specific item in the day's work before going through all the processed copies that we keep.



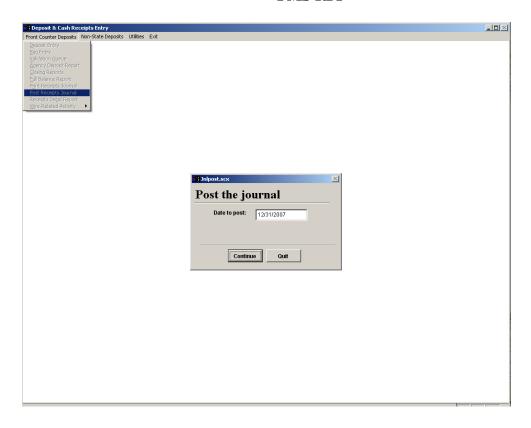


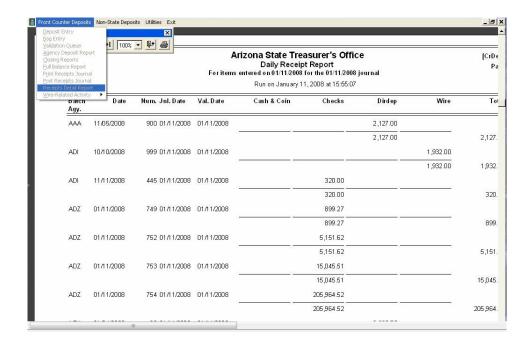
This report shows the total for cash, checks, direct deposits & wires. The totals are compared to the totals from the bank deposit tickets brought by the agencies with their deposit forms (GAO-505/605).



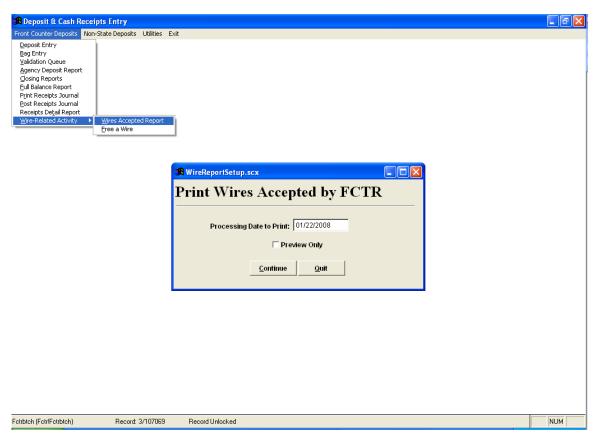


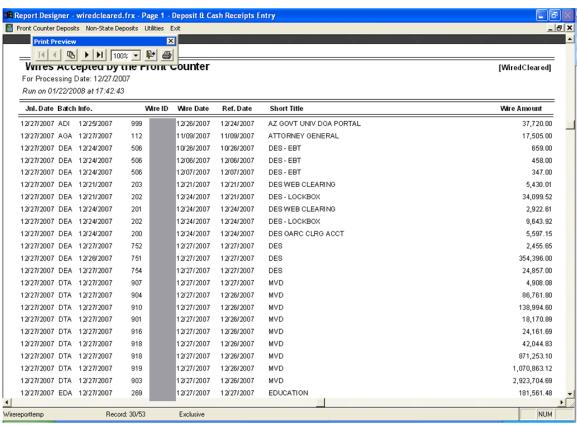
Shows receipts to be posted to the General Ledger.



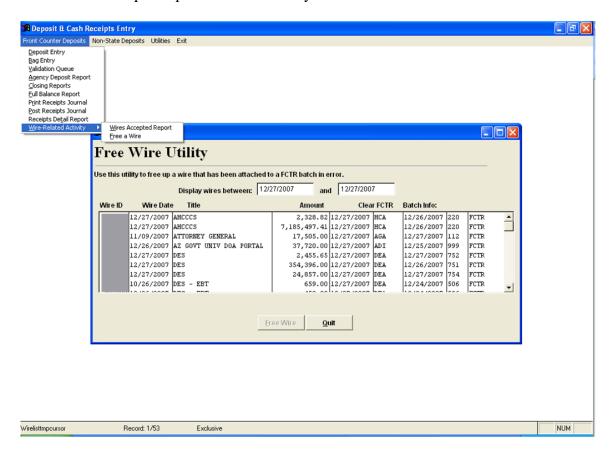


Report shows alphabetically listed by agency the deposits processed for a specified time period.



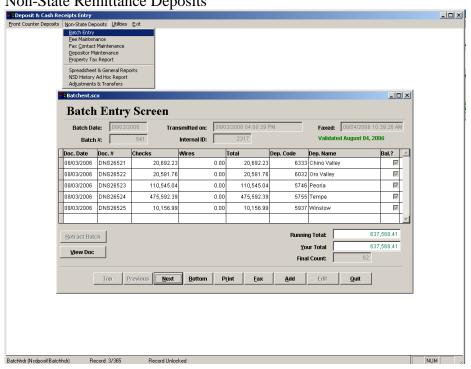


This is printed and kept with the daily bundle of deposits. It shows the wires that were matched to the deposits processed for the day.

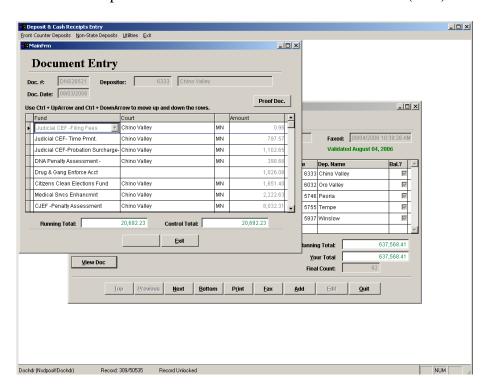


This is used to "free" a wire that was previously "grabbed" during the deposit entry for a deposit that was processed. This is commonly used in conjunction with deleting a validated deposit when corrections are needed or if the wrong wire was processed with a deposit. This is needed so that the wire will be available in the wire list later to be able to process the deposit when ready.

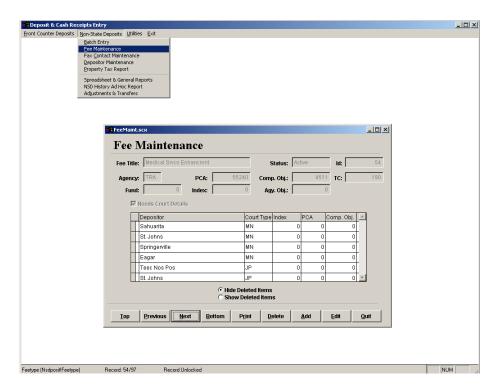
Non-State Remittance Deposits



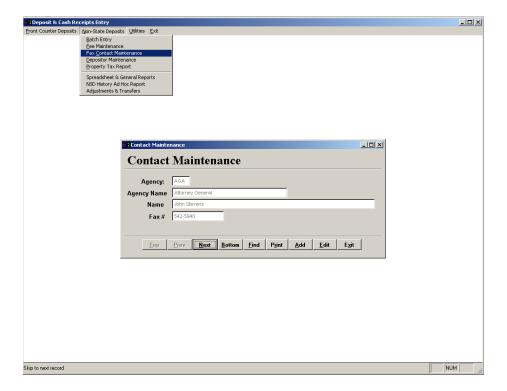
Information input from non-state remittance form and check (wire) amount received.



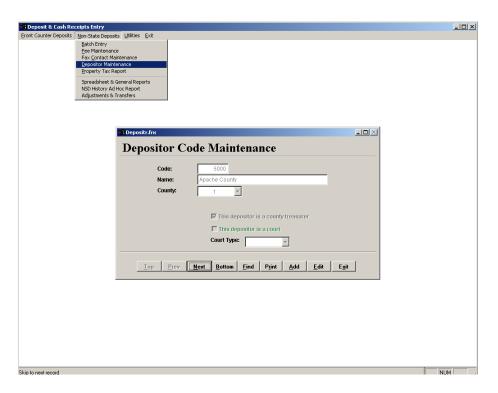
Detail information by fee type input from non-state remittance form.



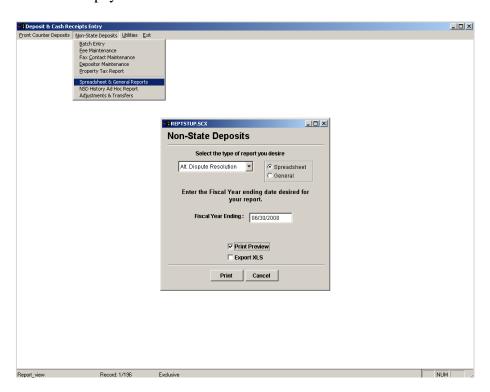
Screen used to maintain fee types, update USAS information used for upload from our system to USAS.

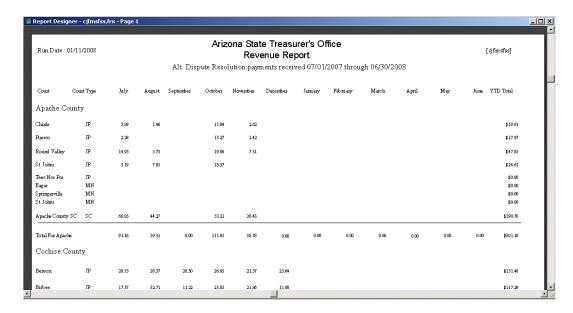


Used to maintain names and fax numbers from agencies for faxing notices.

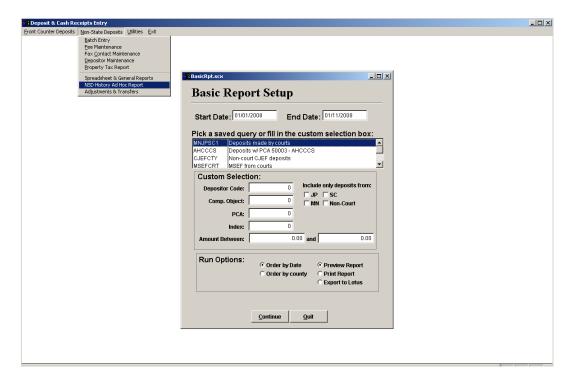


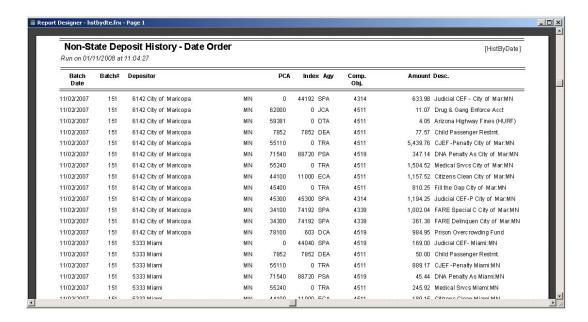
Maintain unique depositor codes (assigned by our office) for all courts/government entities that pay fees.



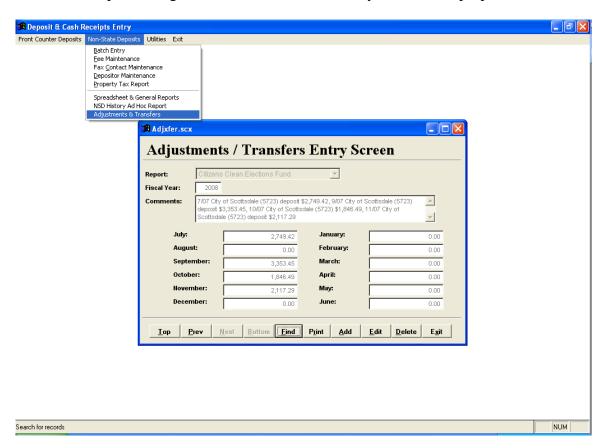


Reports run at end of month for distribution to state agencies.

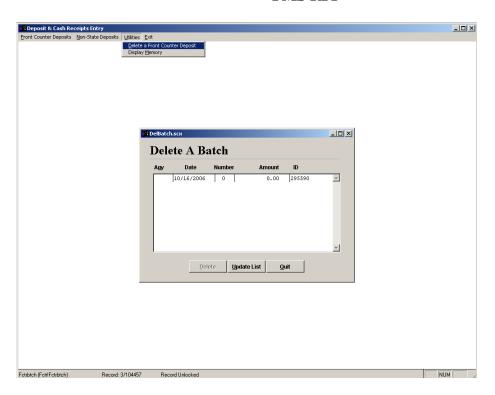




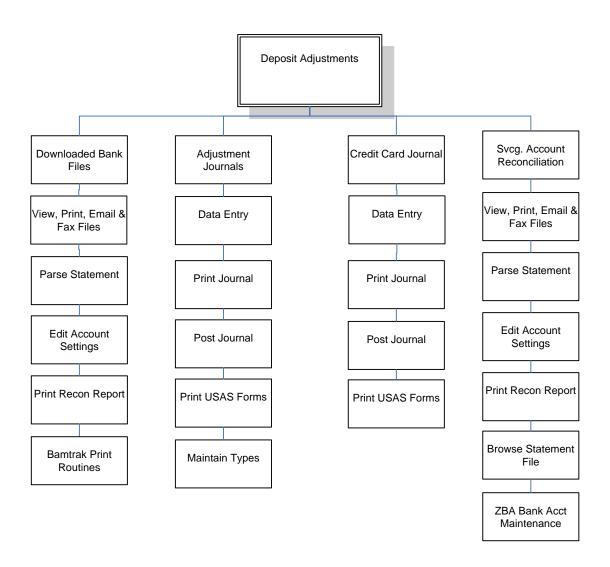
Used to run reports using different search fields, usually for research purposes.

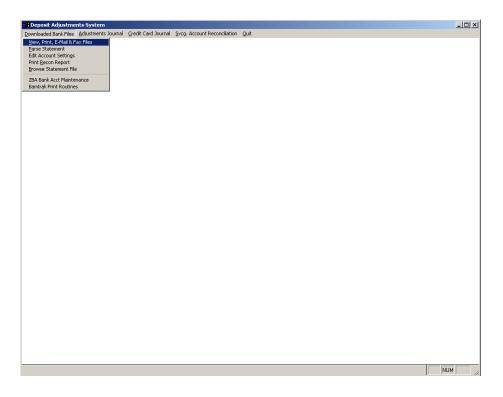


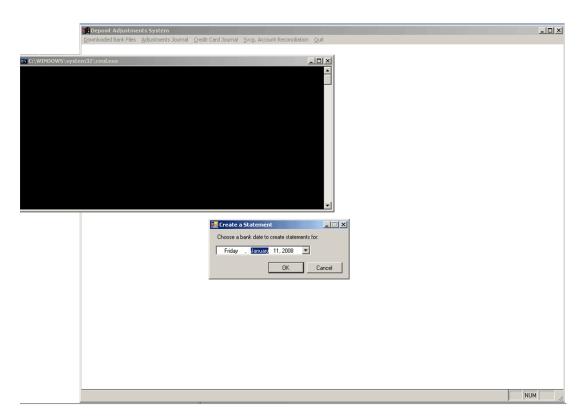
This screen allows for adjustments or transfers to be added to the spreadsheets/general reports. Comments are added that show up at the bottom of the report, the amount shows up in the adjustment line on the report for the appropriate fee.



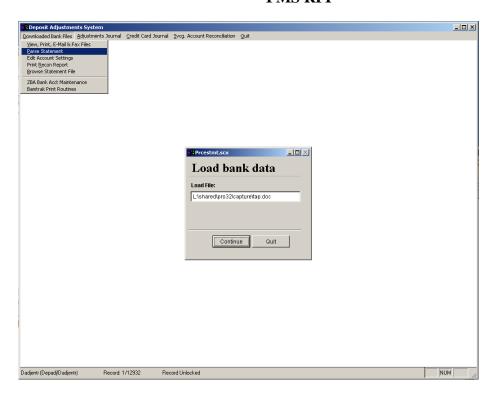
Used to delete a state agency deposit after it has been processed and validated.



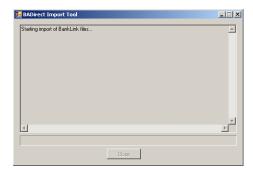




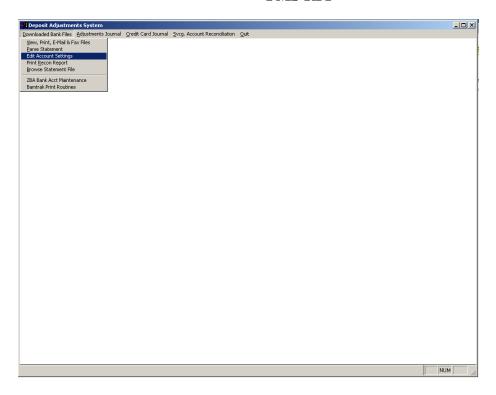
From the data load from the servicing bank; it allows us to view, print, email or fax banking statements.



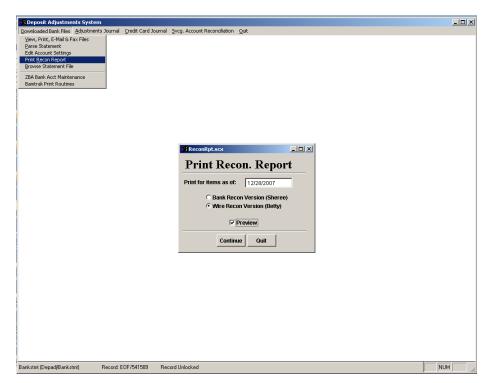
Loads data from servicing bank.



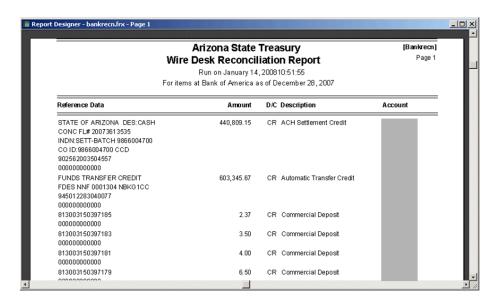
Performing parsing routine



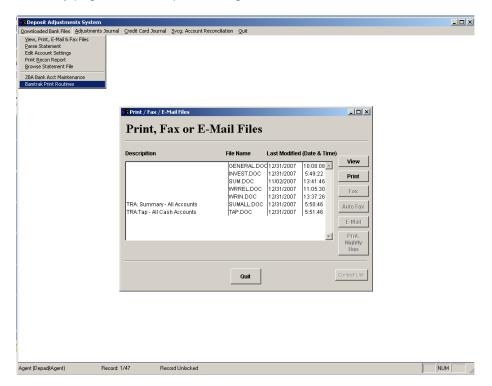
Gives us the ability to change individual bank account settings.



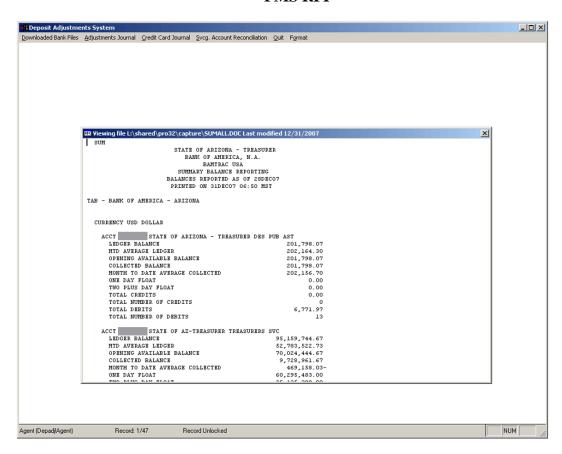
Allows us to print the daily bank activity.



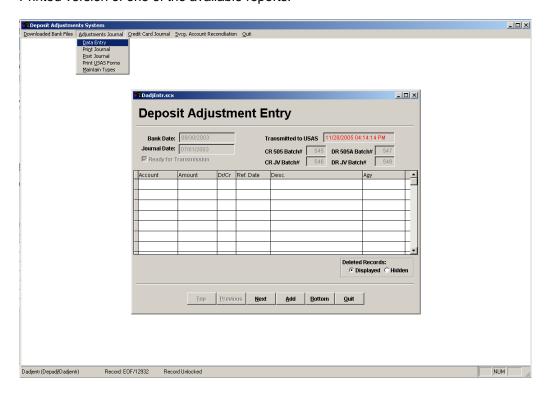
View any pages or screen prints being sent out.



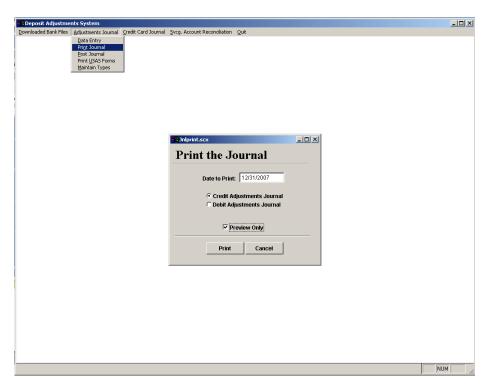
Provides bank statement information.



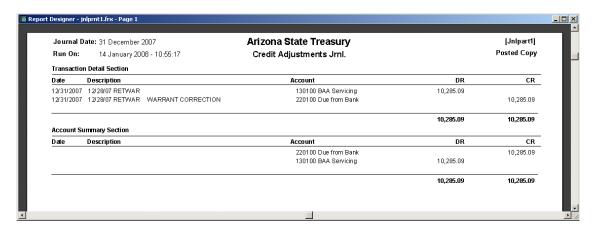
Printed version of one of the available reports.



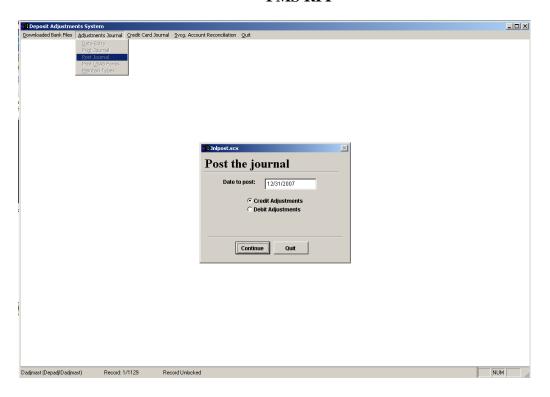
Manually enter the deposit adjustments received from the servicing bank on a daily basis.

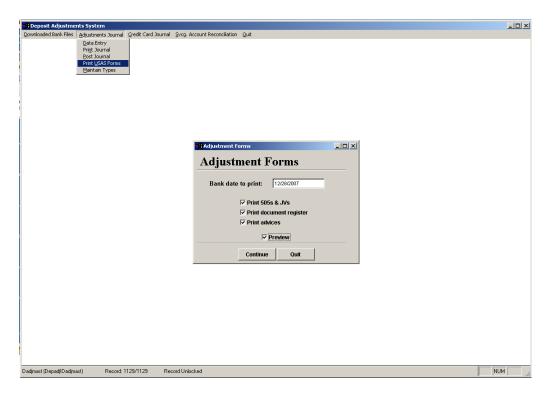


View the un-posted version of the deposit adjustments.

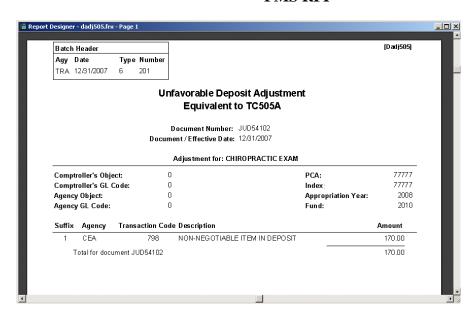


View the above.

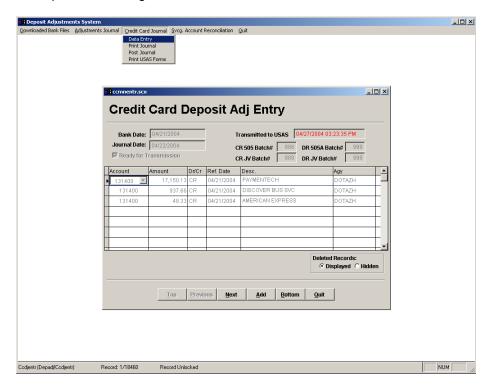




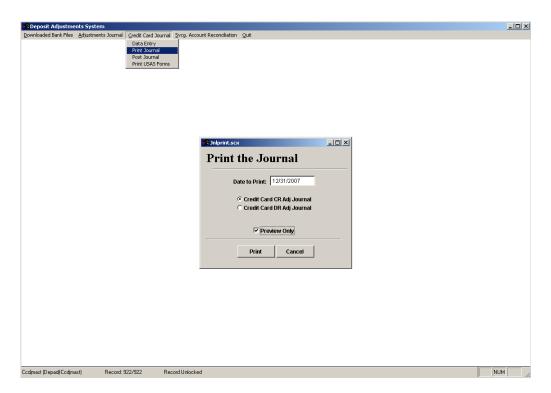
Print deposit adjustment documents.



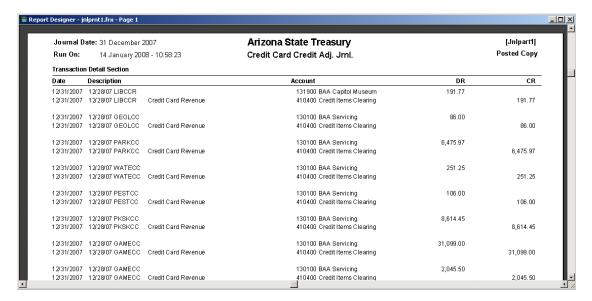
The printed deposit adjustment document. Documents are sent to the agency along with deposit backup from servicing bank.



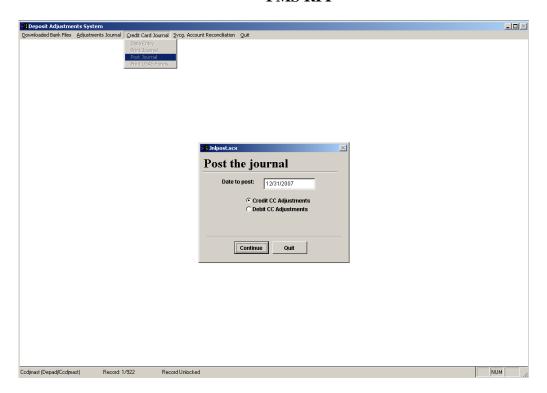
Manually enter the credit card adjustments received from the servicing bank on a daily basis.



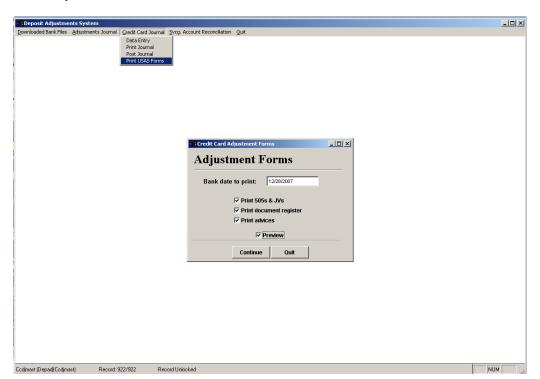
View the un-posted version of the credit card adjustments.



View the above.



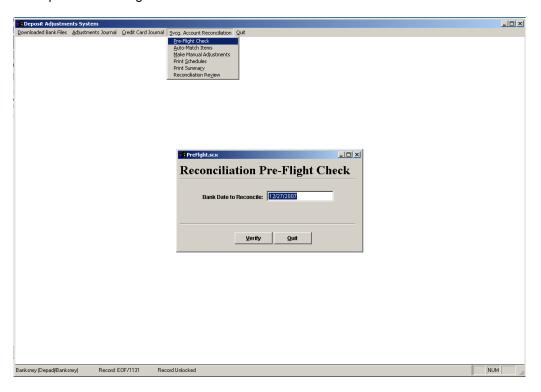
Post the journal.



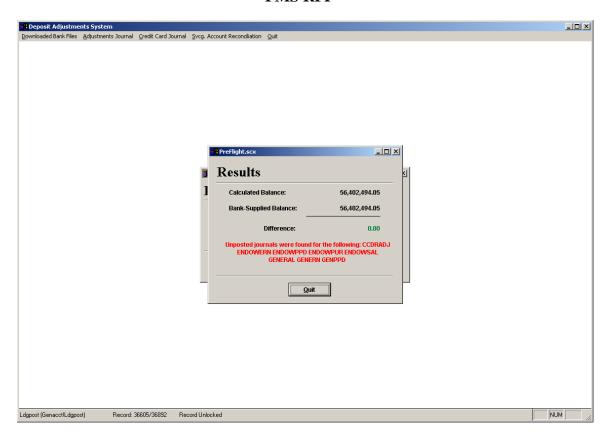
Print credit card adjustment documents.



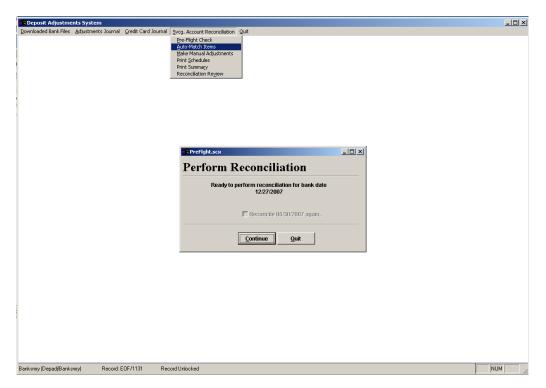
The printed deposit adjustment document. Documents are sent to the agency along with deposit backup from servicing bank.



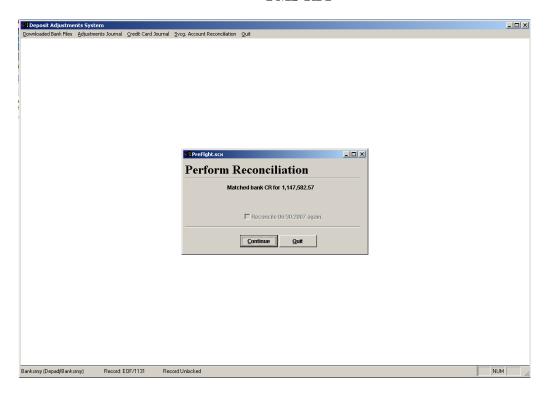
Compares previous day Treasurer's Office balance to data load from servicing bank, debits and credits and then compares ending balance to ensure that we received all banking data during the download.



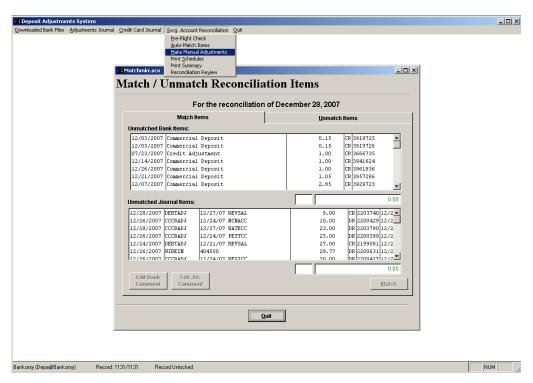
View function from above.



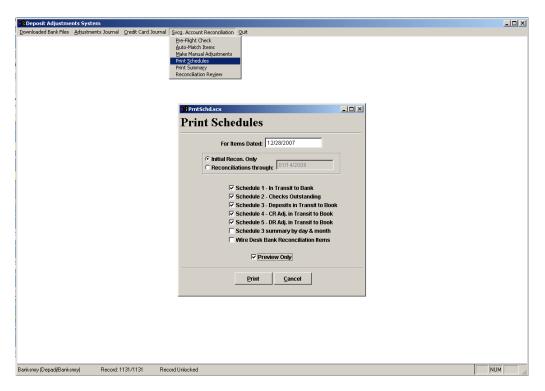
Loads servicing bank data into the reconciliation program.



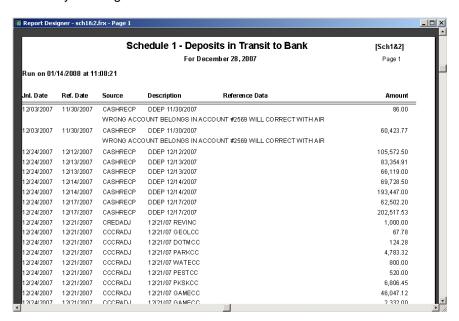
Reconciles as many items that the system parameters allow.



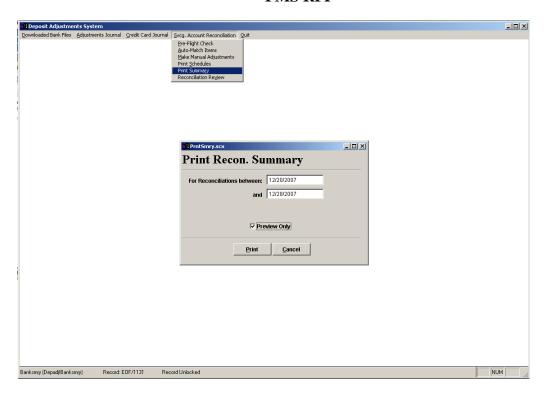
Manually reconcile banking entries to the corresponding journal entries.



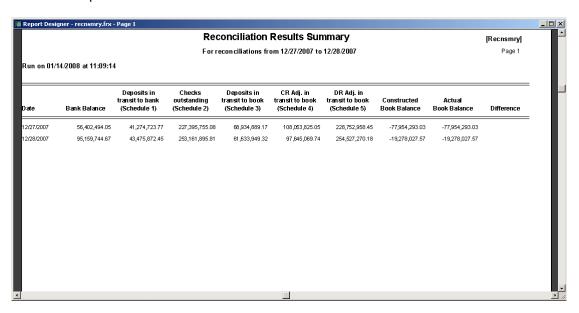
Print daily banking schedules



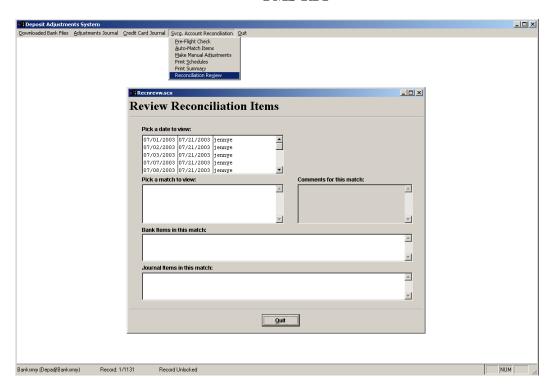
Printed version of above.



Print the recap of the schedules.

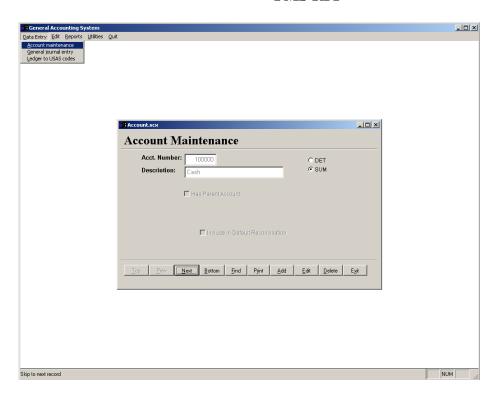


Printed version of above.

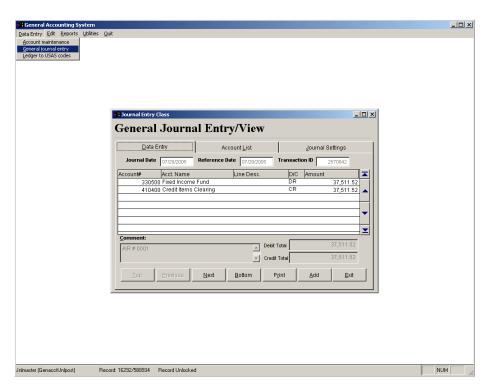


View by day; the servicing bank reconciliations.

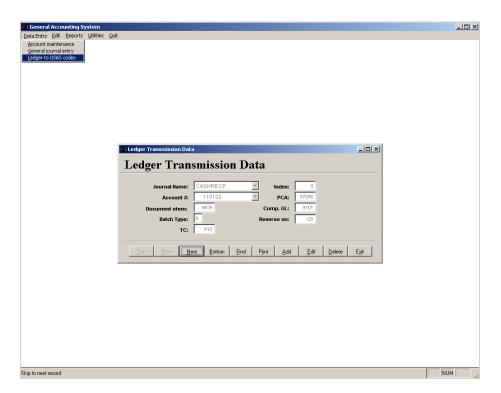
Arizona State Treasurer's Office FMS RFI General Ledger Data Entry Utilities Reports See who has Account Posted journal Maintenance posted General Journal Check Wires for a Journal summary entry date Ledger to USAS Lookup Transmit Cash receipts codes reconciliation Date New reconciliation report Trial balance Journal detail list Account detail list



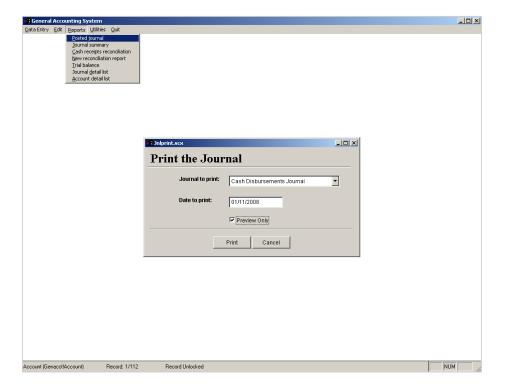
Create, edit or delete accounts in the chart of accounts.



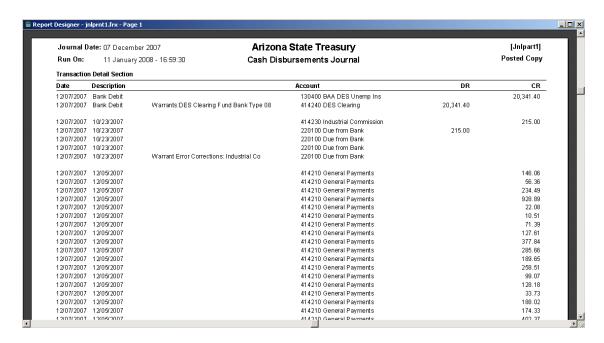
Create a general journal entry.



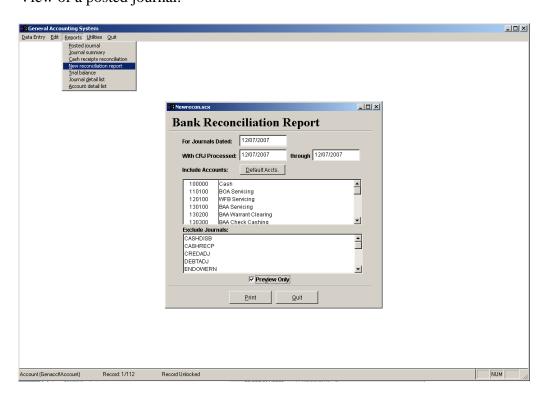
Converts general ledger accounts to USAS account and batch profile.



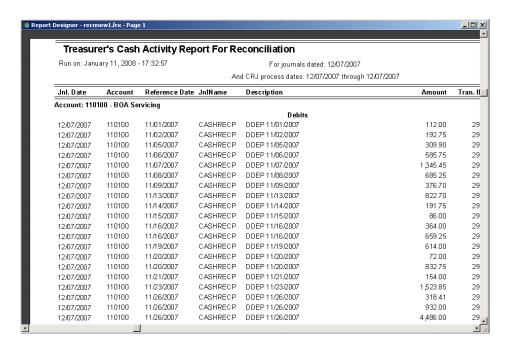
View and print posted journals to the general ledger.



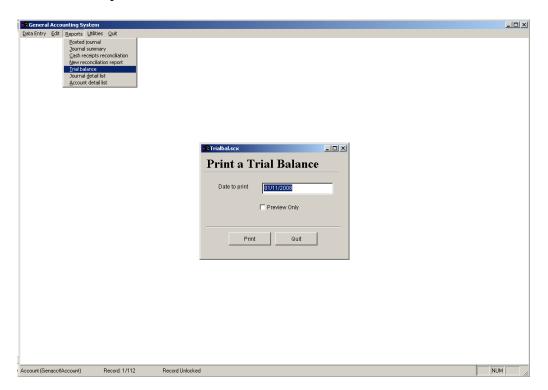
View of a posted journal.

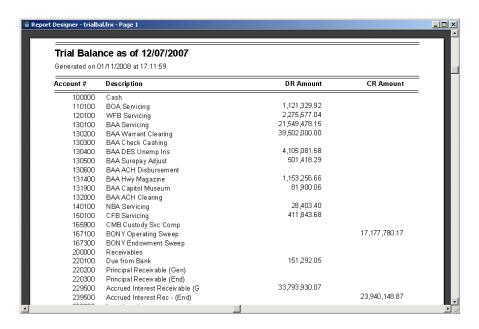


View or print journals by general ledger account for reconciliation of minor banks account.

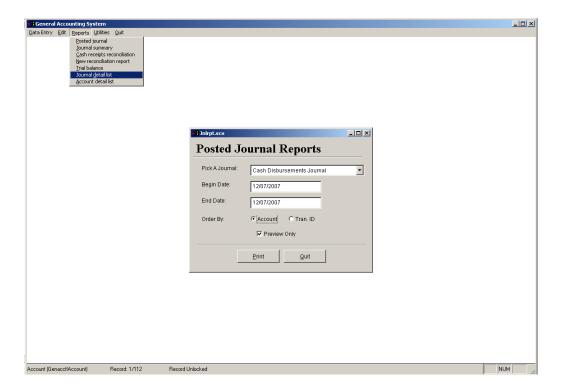


View of the report & used to reconcile minor bank accounts.

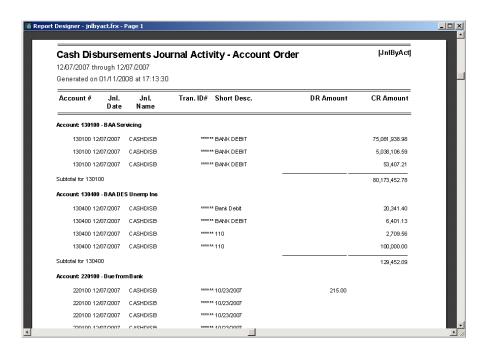




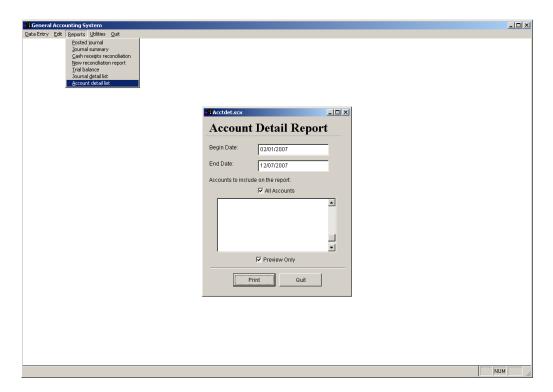
View of the above.



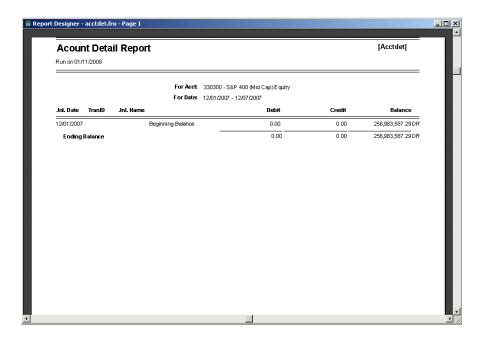
View a specific journal within a date range.



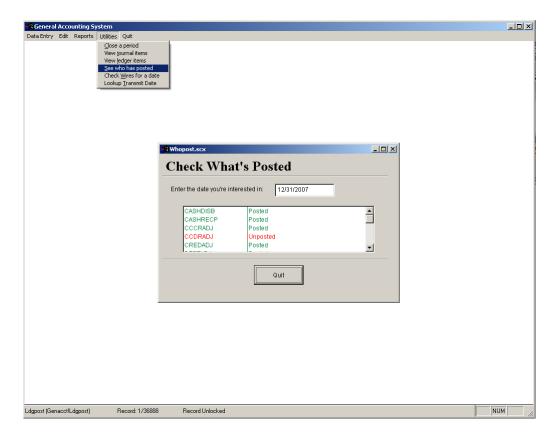
View of the above.



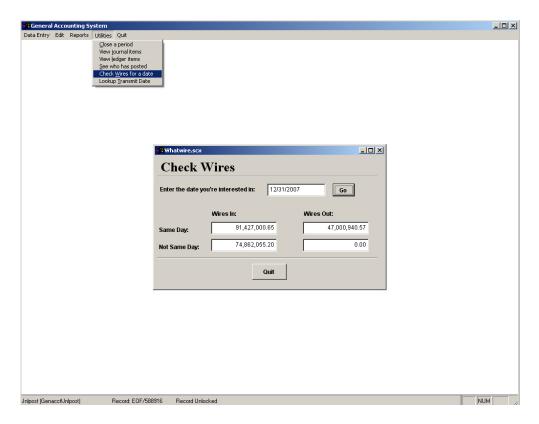
View a specific account within a date range.



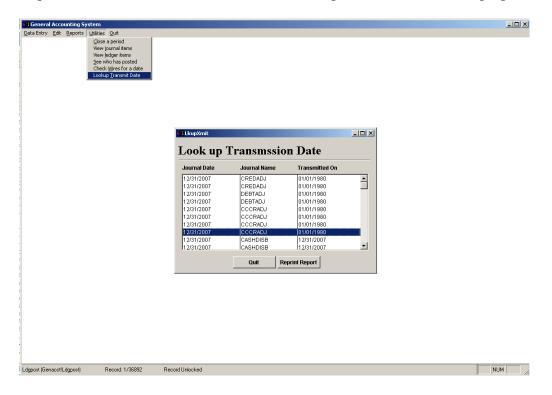
View of the above item.



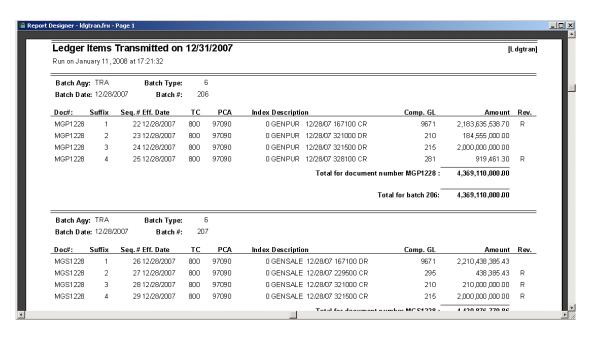
Verify which journals have been posted to the general ledger at any given time.



Report the wire in and wire out totals without duplication for cash flow purposes.



Track and print the journals that were transmitted to USAS.



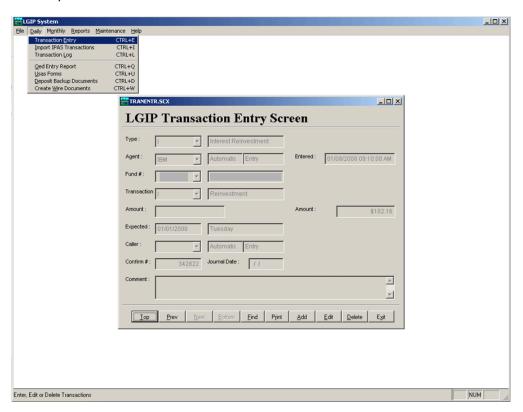
Comparison of items sent to items received in USAS.

FMS RFI LGIP System Source Logic Daily Maintenance Monthly Reports Preferences Create EOM **Review Member** Transaction Entry Fund Maintenance Balances Balances Import IPAS Import QED End of Month Bank Maintenance Transactions Information Balance Report Member Reference Transaction Log QED/Internal Account Reconcilliation Report Maintenance QED Entry Report **Edit Statement** Member Status Caller Maintenance Report Comment **USAS** Forms Full Account List Print or Email Participant Statements Report Maintenance Deposit Backup Print Condemnation Fund Caller Pool Maintenance Documents Verification Report Create Wire Post Interest Agent Maintenance Documents Transaction Type Maintenance Send Email Notice to Participants

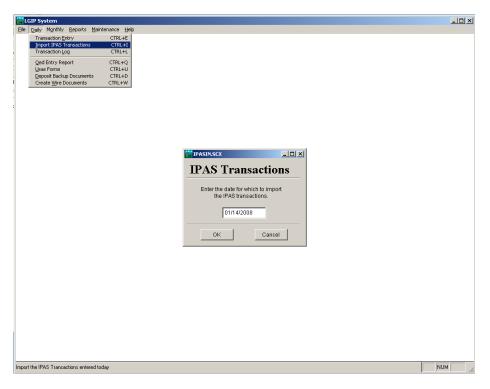
Arizona State Treasurer's Office



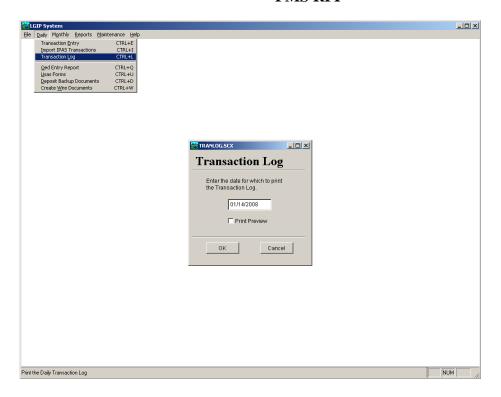
Table is used for transaction entry screen (see "Daily", "Transaction Entry") to be used to separate different types of transactions for the LGIP. Each transaction type initiates actions to other reports when box is checked.

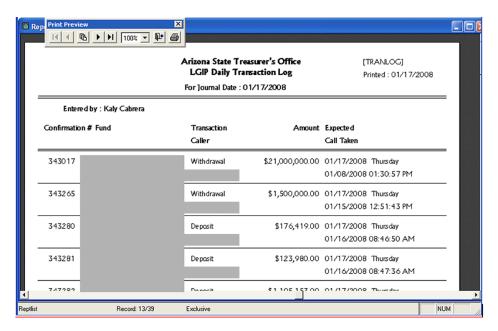


To enter all transactions (deposits/withdrawals/transfers between accounts, interest reinvestment, distributions of sales tax, etc from the distribution division) for LGIP participants. IPAS file from QED imported into the table attached to this form. Other files are also imported for transaction types, such as, monthly interest posting, distributions, and etc. Data entered through this form is the basis for a daily export file to QED (investment accounting software). This data updates LGIP participant accounts, in QED, for that day's transactions. Transaction data is transmitted to the wire system for all deposits and withdrawals that are a transaction type 'Call-in' or 'Online IPAS'.

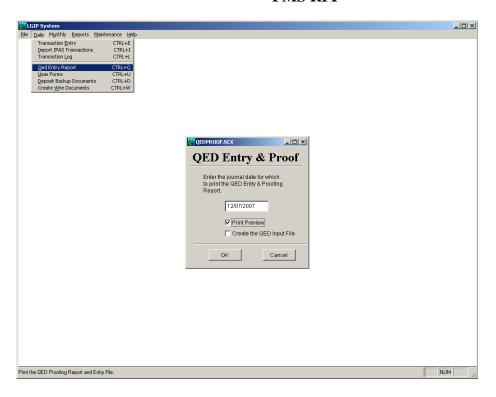


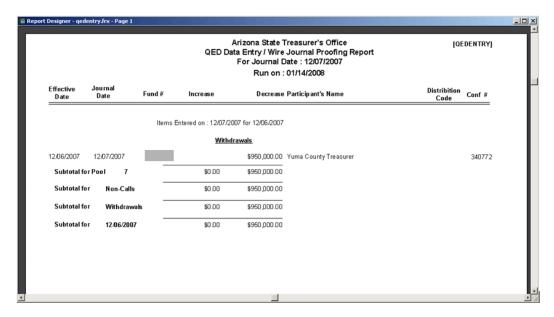
Import IPAS (QED) transactions (deposits/withdrawals/transfers) into the LGIP system.



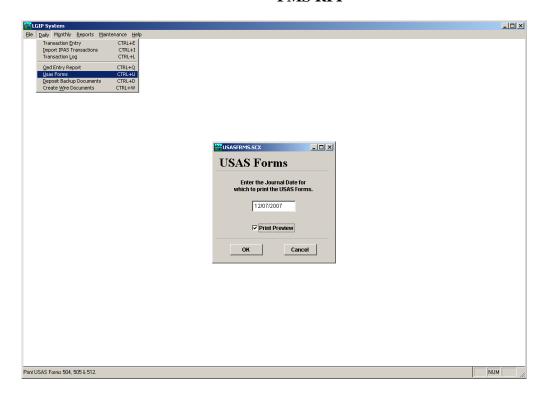


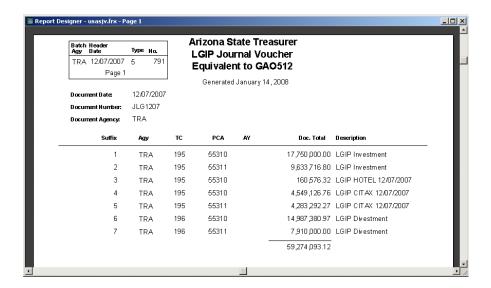
Produces report which shows all transactions entered into LGIP for the current day. (Note: transactions shown also include transactions entered in the past for the current day.)





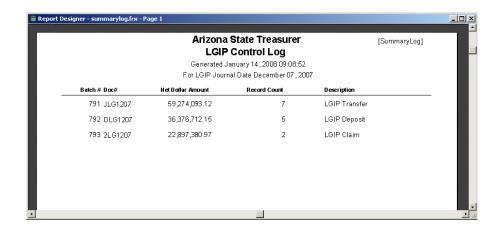
Produces report which shows all transactions entered into LGIP for the current day by transaction type and transaction source. This function actually facilitates the creation of the daily QED export file, based on date entered in the Transaction Entry Screen.



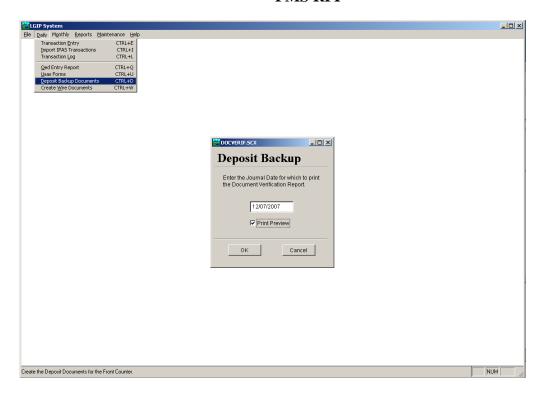


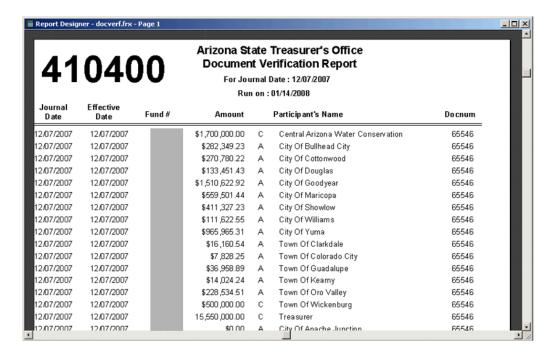




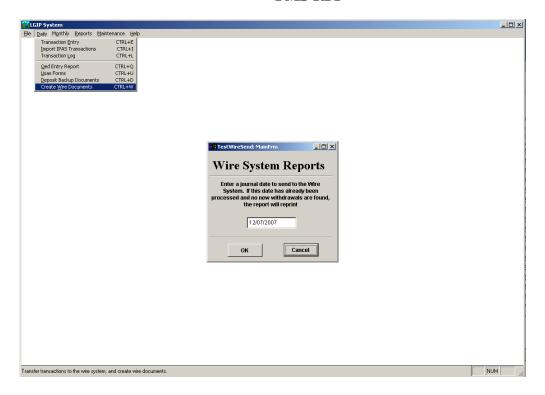


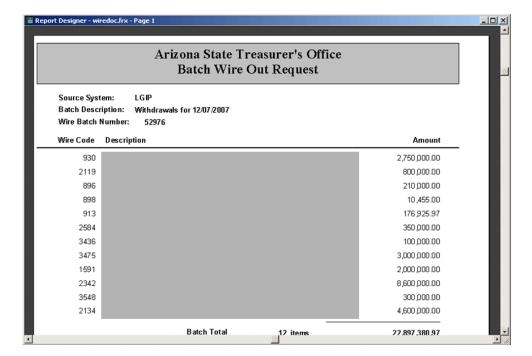
Produces USAS forms from the daily LGIP transaction data.



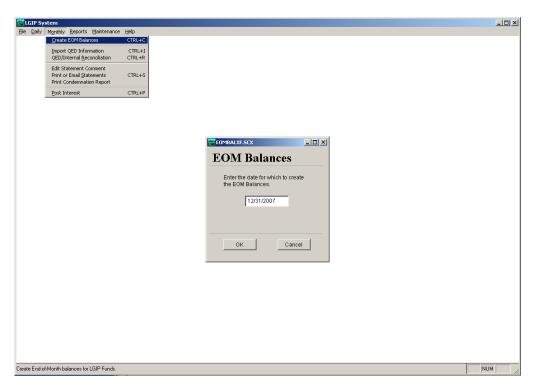


Produces form to be deposited with USAS deposit form across the front counter.

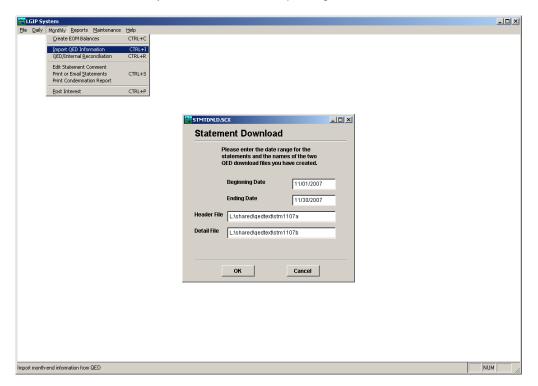




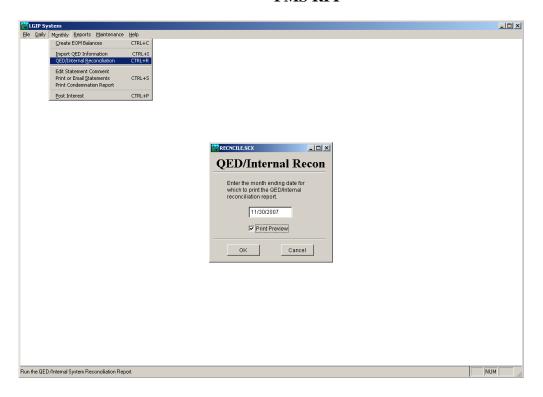
Produces report and bank wire file with LGIP withdrawal transactions for the day.

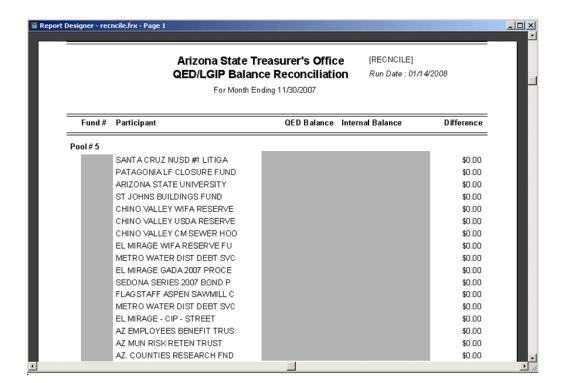


Program creates balances for end of the month for all active LGIP members. (Pool 5 and Pool 7) Please note that LGIP system is used first for posting most transactions.

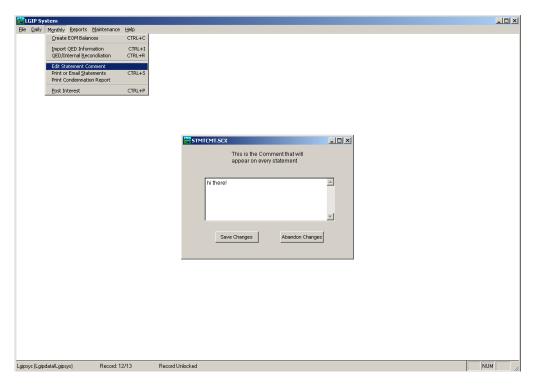


Import 2 files from QED and collect data for the participant's statement of account.

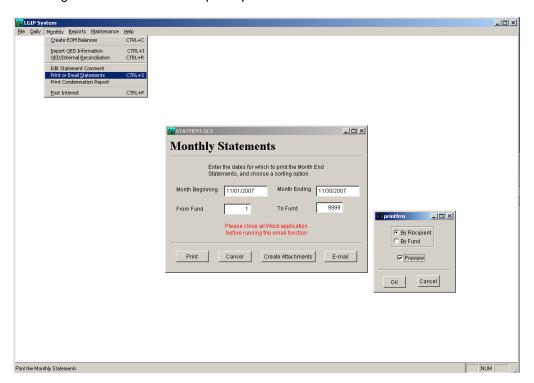


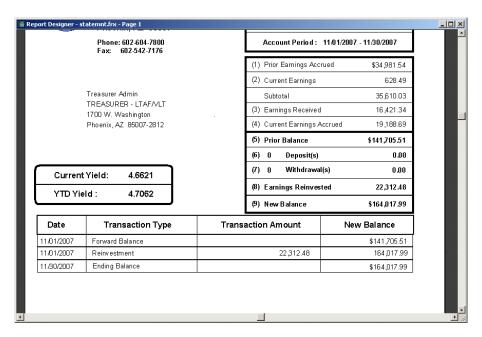


Reconcile participant balances from QED to our LGIP system. Report is printed.

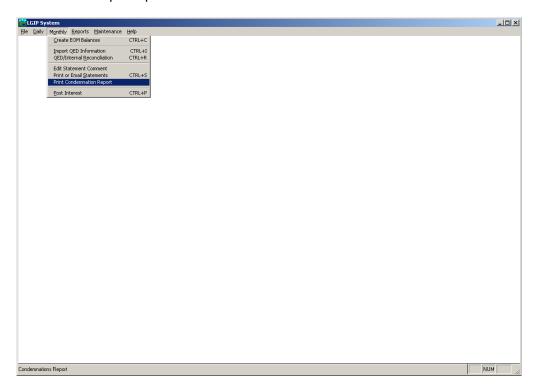


Record general comments to all participants via the statement of account.

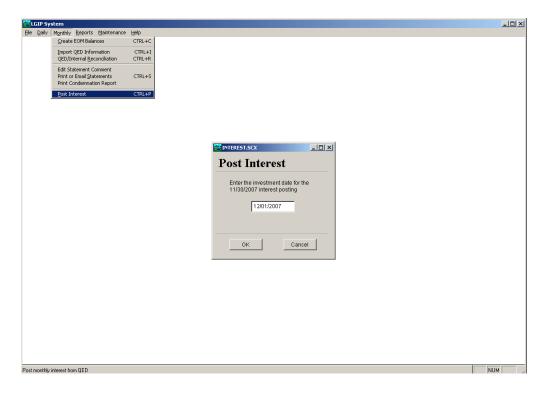


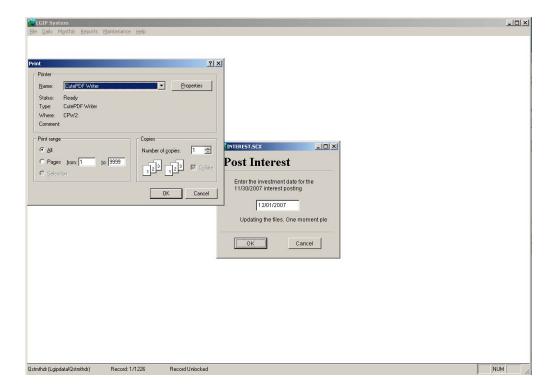


Print and email participant's statement of account.

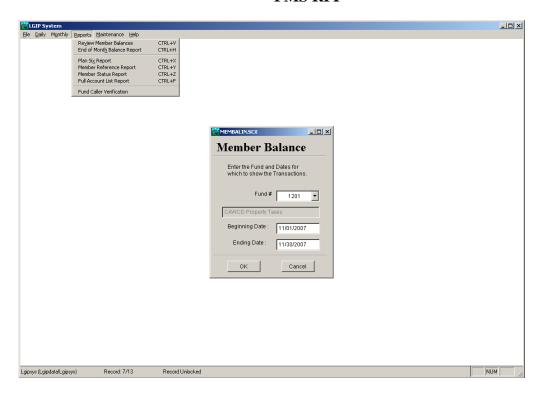


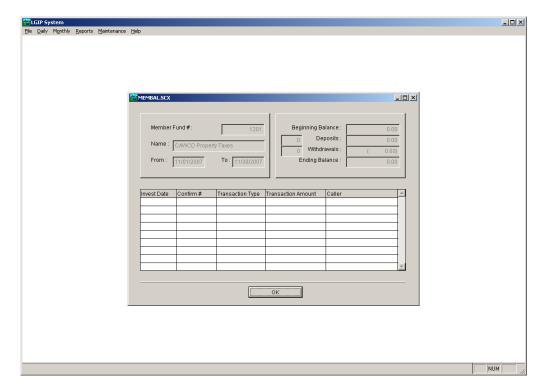
Print condemnation participant statement of accounts separately



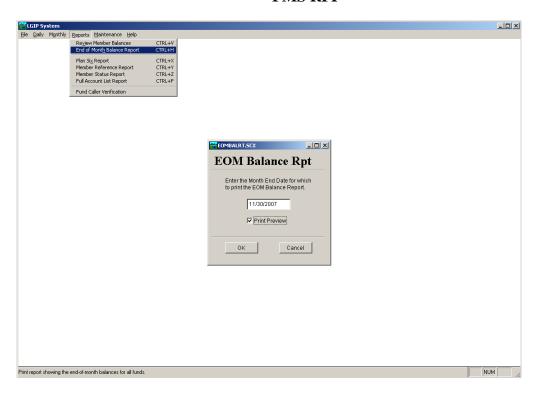


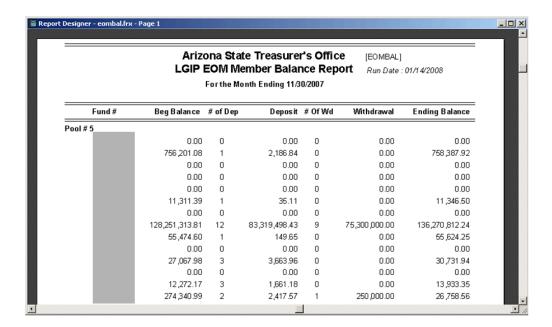
Post earnings distributed to LGIP system. This posting will be uploaded to USAS.



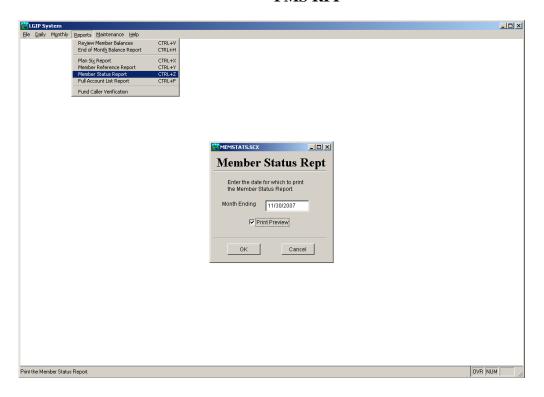


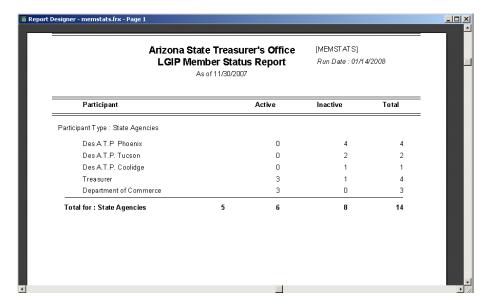
Used to check LGIP participant balances and transactions for any time period.



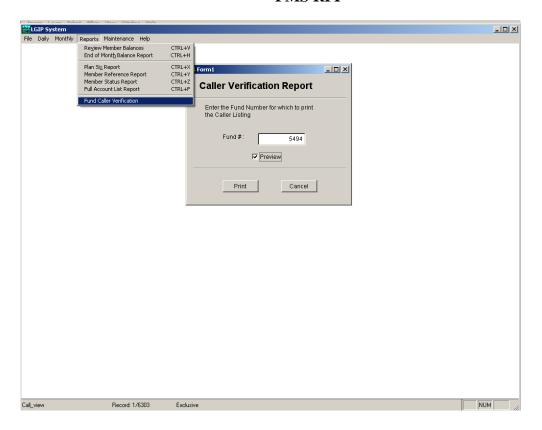


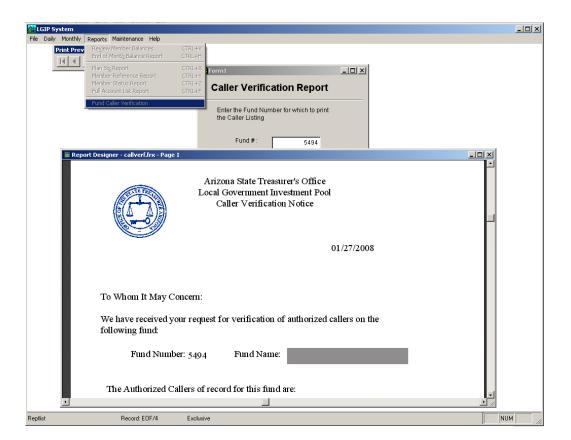
Report with all LGIP participants ending and beginning balances, net deposits and net withdrawals.





Report which shows all participants by city, county, agency, or other. Report shows summary of active and inactive participants' accounts.





Produces report showing authorized callers by individual LGIP participant account.

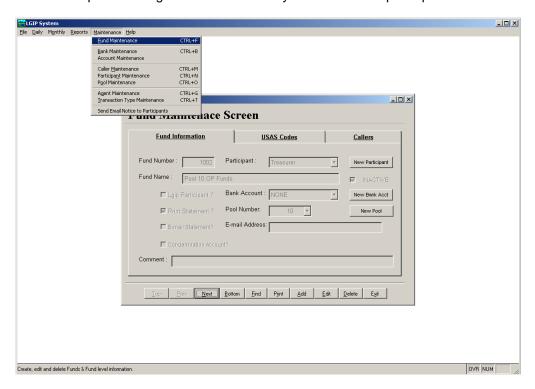


Table containing account numbers of all participants, relevant banking information, USAS, callers, etc.

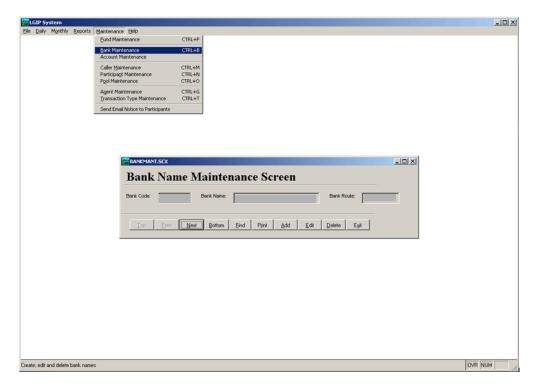


Table for banks in which we wire monies to for the LGIP participants.

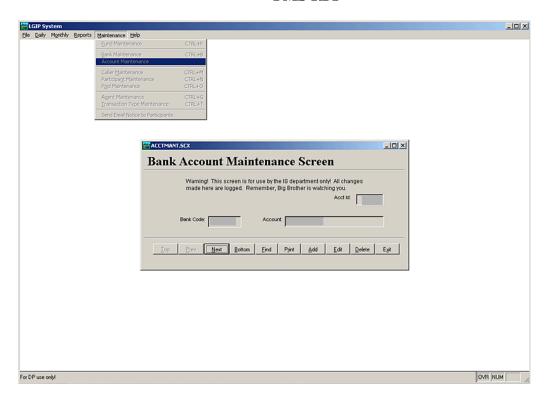


Table for bank account numbers in which we wire monies to for the LGIP participants. Table based on repetitive wire codes. When new account added, the next wire code number not in use is assigned.

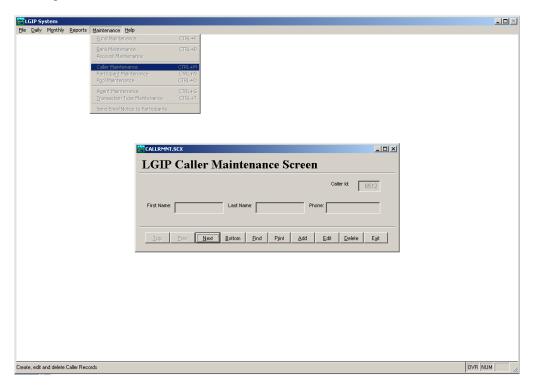


Table for authorized callers for LGIP accounts.

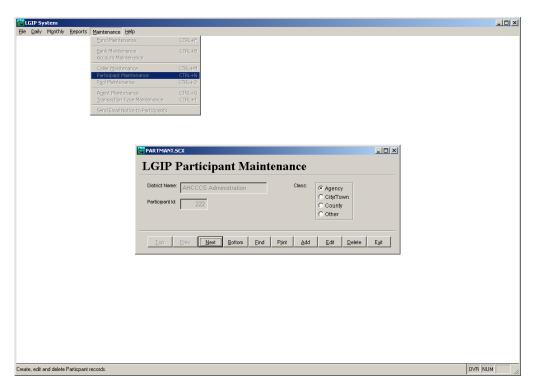


Table for participants (whether they are a city, county, agency, or other).

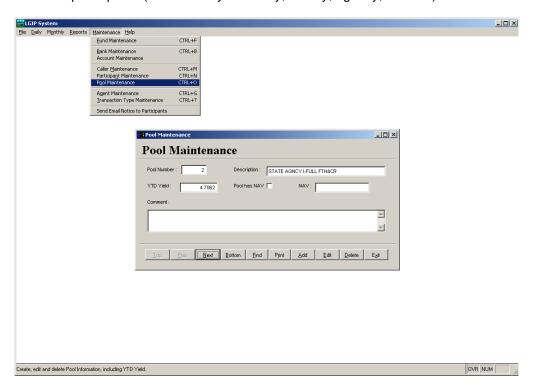
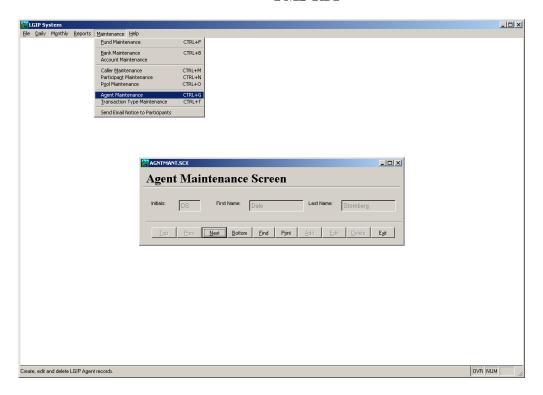


Table for Non-Endowment pools. (Pools in which our participants invest monies in)



State Treasurer's Office agents authorized to do LGIP transactions. (Table is read-only)

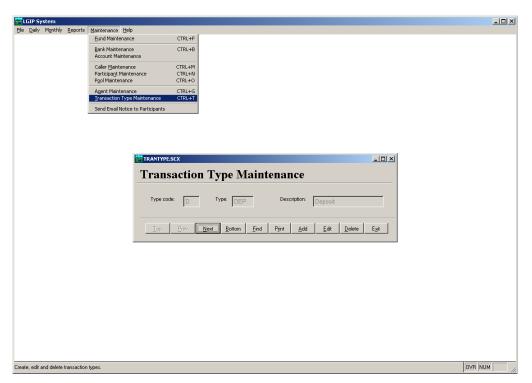
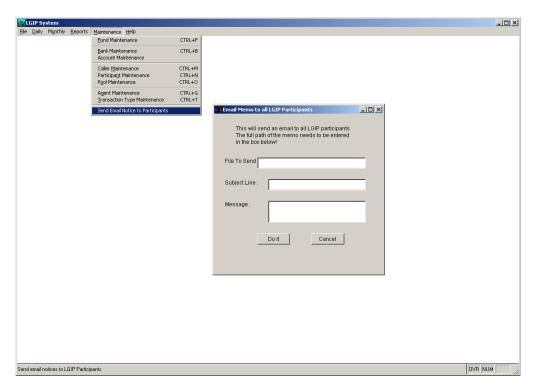
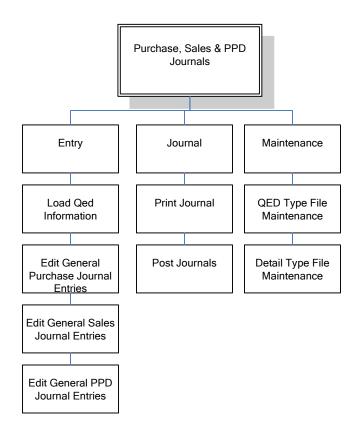
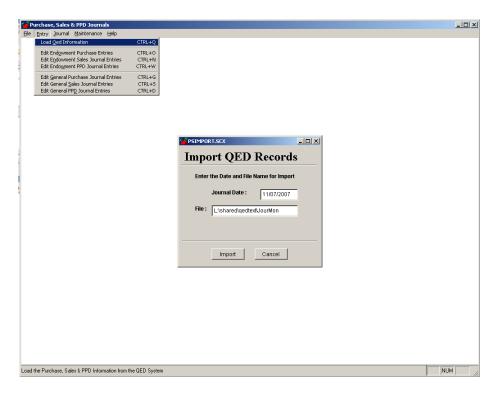


Table for types of transactions. (Deposit, withdrawal, etc) - used in the LGIP Transaction Entry Screen.

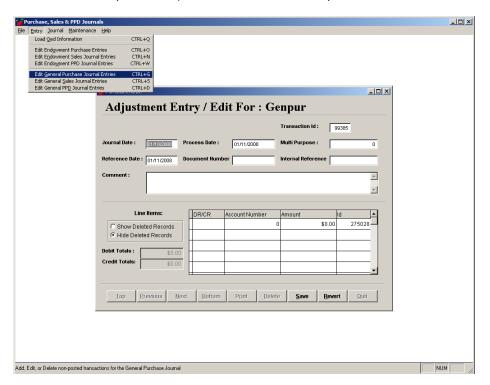


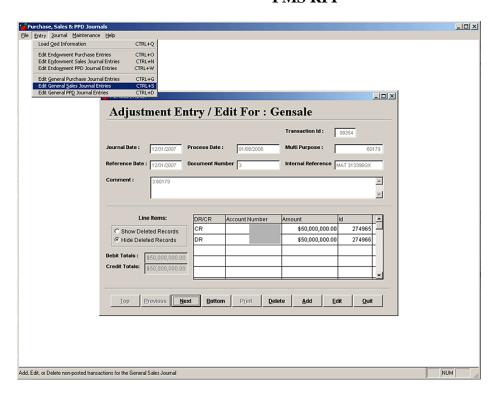
Send message to all participants shown in fund maintenance which have email addresses.

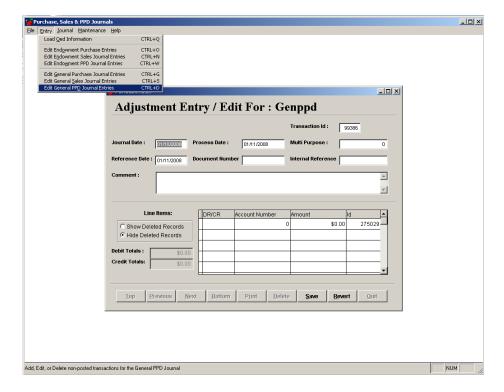




Import data from QED file for daily Purchases, Sales and Pay down journals. This data will be used to post the daily activity for investment transactions (Maturities, interest, principal pay downs, calls and purchases) for our non-endowment portfolio to the General Ledger.

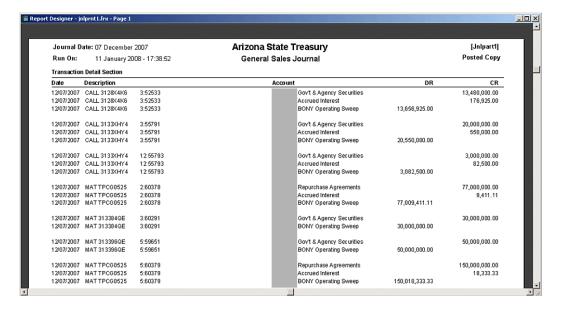




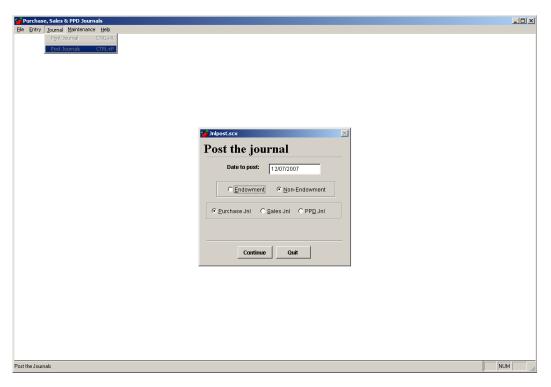


Edit QED journal information upload if required. Data is matched against the bank statement from BNY Mellon (by totals) and if something was not changed in QED (in error), these screens are used to make changes (add or edit).

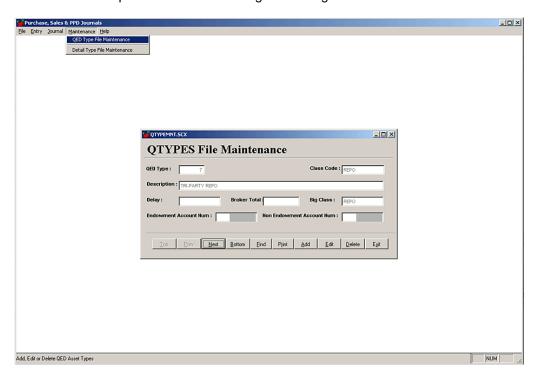




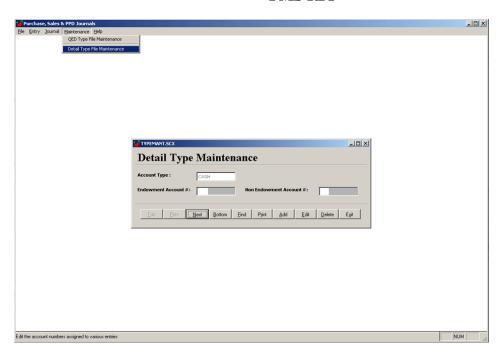
Print daily general sales, purchases, and pay down journals. Totals are checked to daily BNY Mellon Bank statement for accuracy.



Post daily journals after amounts are verified against BNY Mellon bank statements. These entries are then uploaded to our internal general ledger and then to USAS.



This table is used to enter QED asset type data (table) which designates what general ledger accounts to use for this asset type's transaction.



This table is used for premium, discount, purchased interest, interest, gain & loss, and cash general ledger accounts. These General ledger account numbers are not based on asset type transactions, but on a formula/calculation using certain data fields from the uploaded QED file.

Arizona State Treasurer's Office FMS RFI QED Parse System Reports File Maintenance Utilities Reconciliation Asset Group Crosswalk Select/Revert Files BONY to QED Maintenance Reconcilation Deferred Disc. USAS to QED Accretion Reconcilation Market Value Report 7900 Book Value Report

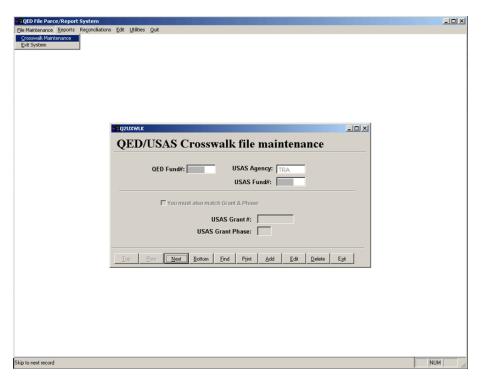
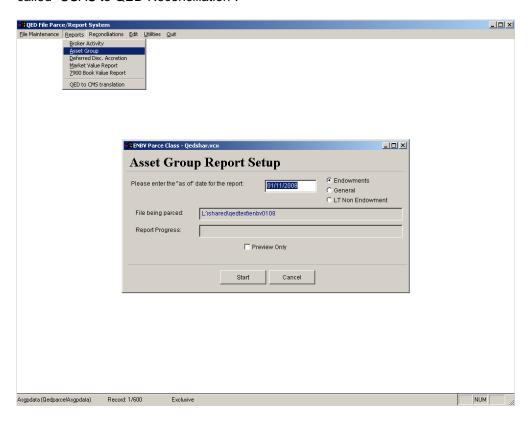
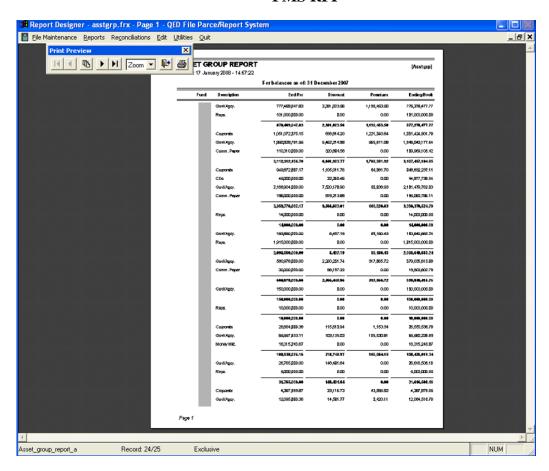


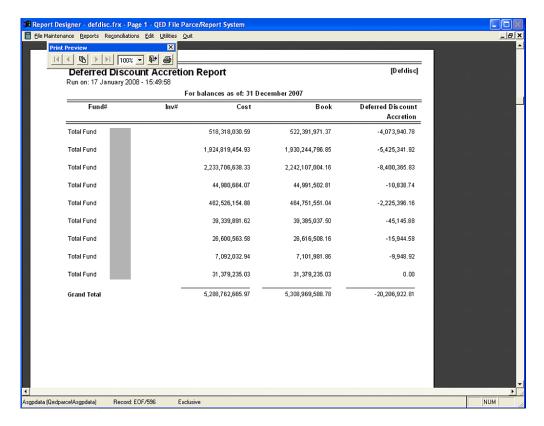
Table is used to enter QED participant account numbers. For each account number entered, an USAS State Agency, Fund Number, and Grant and Phase Number (Optional) will be entered from a completed new participant account form. This table is a crosswalk for the Reconciliation Report called "USAS to QED Reconciliation".



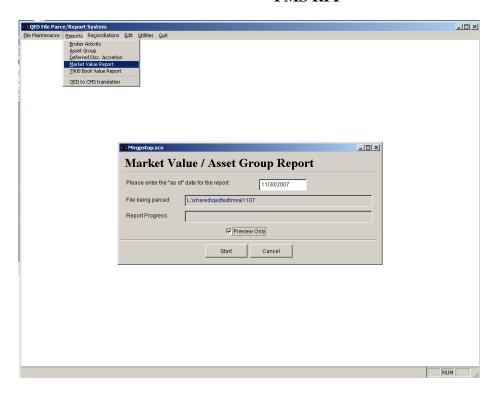


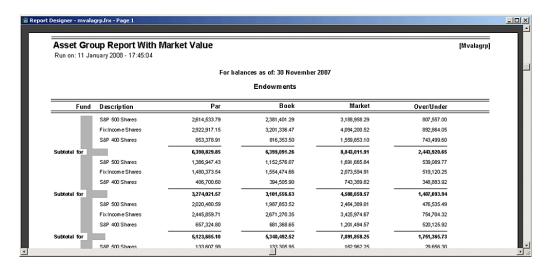
Uses QED file to generate the Book Value Report for Non-Endowments, Endowments, and Long-Term Non-Endowments by Pool number and as a whole for the portfolio. Report breaks down QED file by asset categories (Repo, etc.). Asset types on QED file is the major field used to distinguish the data into the categories. This report is used to reconcile some of the investment accounting General Ledger accounts to USAS (we do this in an excel spreadsheet).





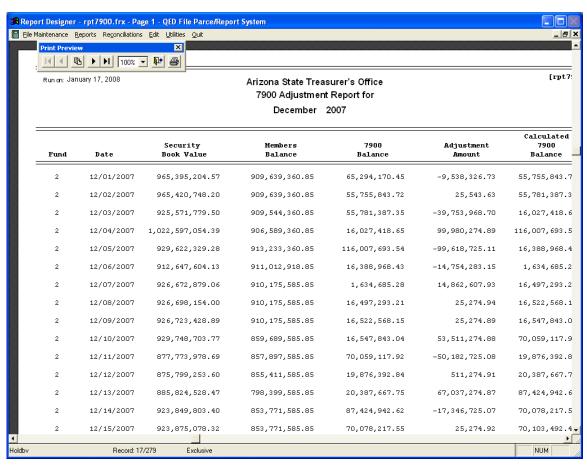
Uses QED file to calculate deferred discount income by pool #.



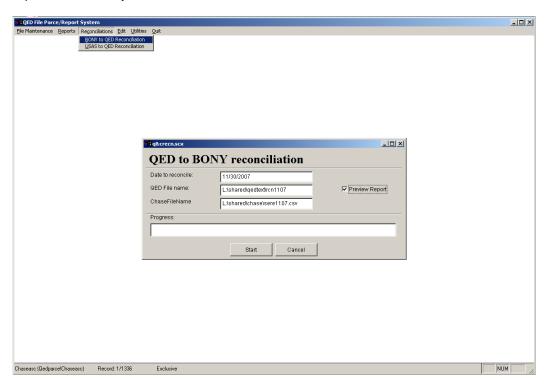


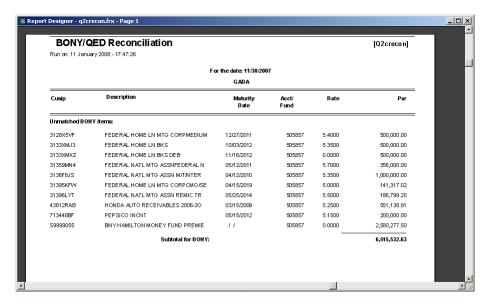
Uses a QED file to generate market value by Pool and this report also generates totals for each Asset group for the Non-Endowments and Endowments. Report breaks down QED file by asset categories (Repo, etc.). Asset types on QED file is the major field used to distinguish the data into the categories.





Uses a QED file and generates entries to post to 7900 (General Fund) by pool. These entries (adjusted amount) are put into a file (optional) which is then used to upload to QED and post. Another aspect of this application is that if any of the pool's 'calculated 7900 balance' is negative on any individual day, an exception report is printed with that day and the amount of the negative balance. If no exception report is printed, then a report shown above is printed. We run this report on a monthly basis.

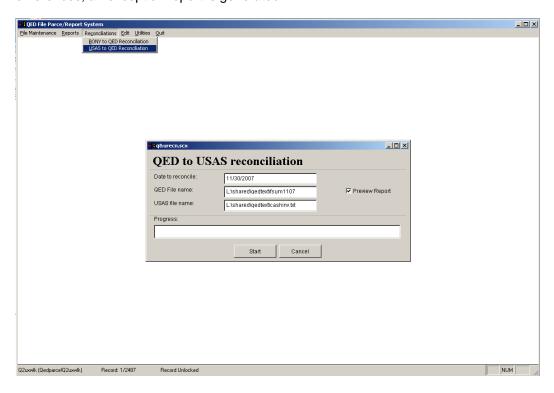


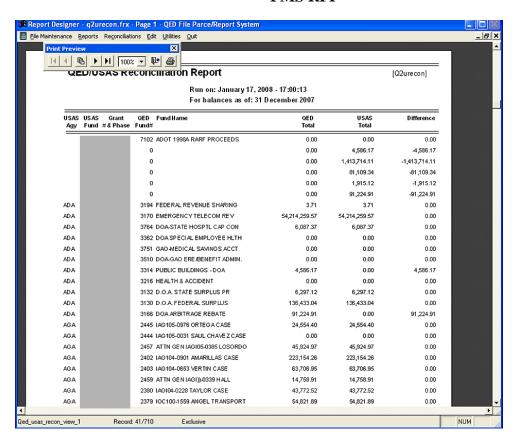


Used to reconcile QED assets held to Bank of New York Mellon assets held on a portfolio basis. Report uses data files from both QED and BNY Mellon. We have multiple BNY Mellon bank

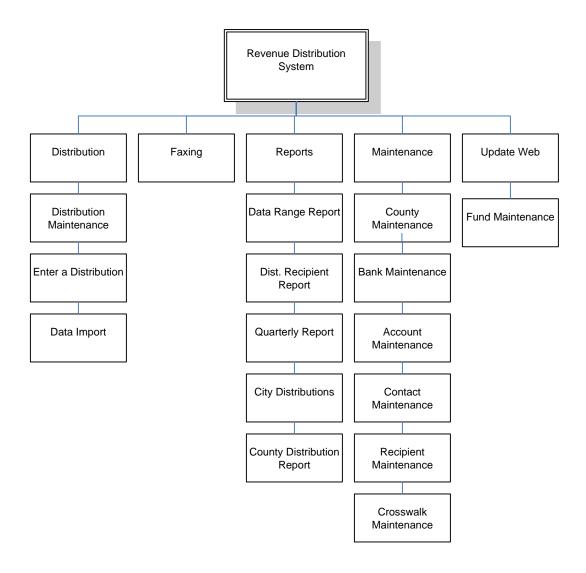
accounts that correspond with different QED pools, but not always on a one for one basis. We have multiple QED pools that would be compared to one BNY Mellon bank account. All the rest

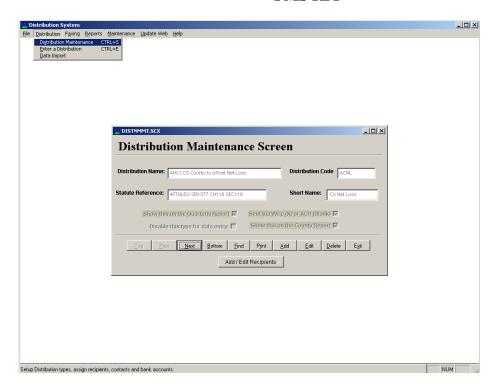
of the QED Pools would have a one to one comparison to a BNY Mellon bank account. This report compares par, rate, maturity date and description by Cusip number. If there are differences, an exception report is generated.



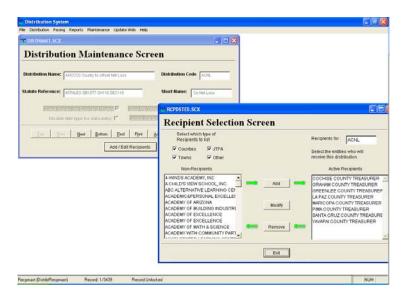


This is used to reconcile participant balances from QED to USAS. Report uses data files from QED and USAS. Report shows all items. 'QED Fund' field is reconciled with 'USAS Fund' field (from USAS).

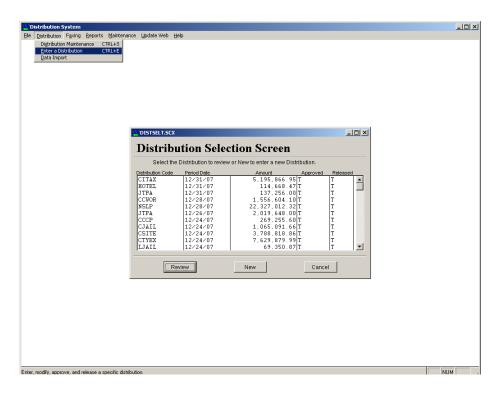




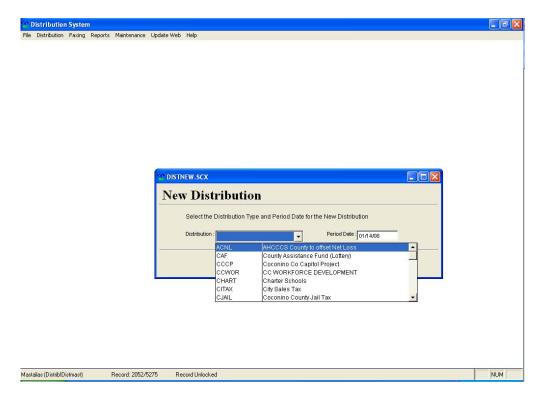
Used to maintain distribution types, add new distribution types.



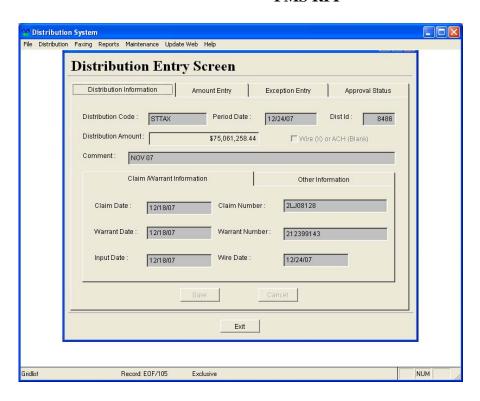
Used to maintain the recipients for each different distribution.



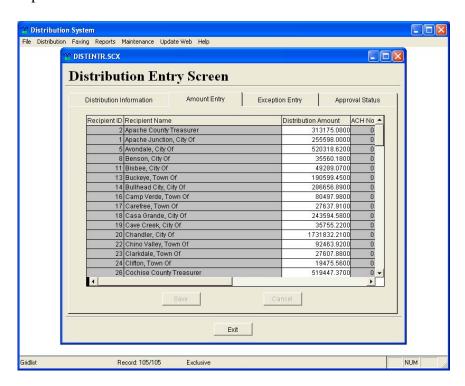
Select an existing distribution, press "Review" button to look at that distribution or reprint any reports pertaining to that distribution.



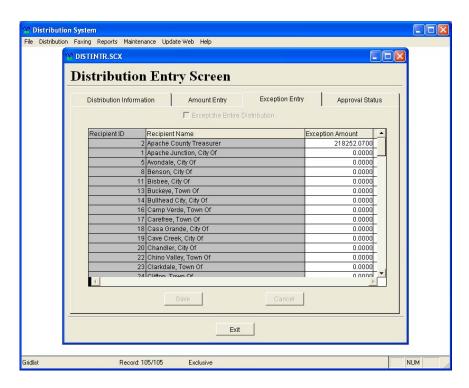
Create a new distribution.



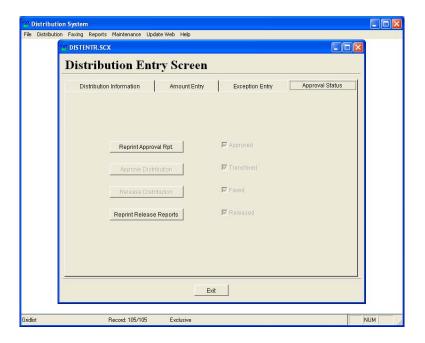
Input information from warrant.



Screen of recipients of distribution, used to input amounts.

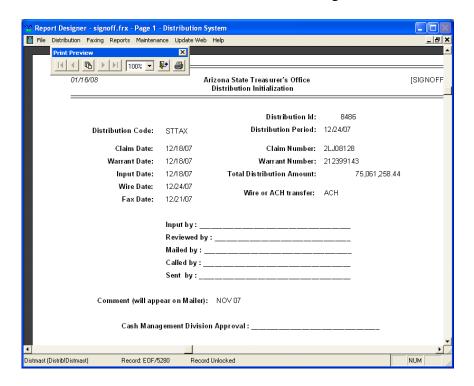


List of distribution recipients, used to input amounts to withhold from distribution. This amount is deducted from the amount entered on the "Amount Entry" page and the net is the amount actually distributed. The net amount is the amount that is used to create the bank wire/bank ach report.

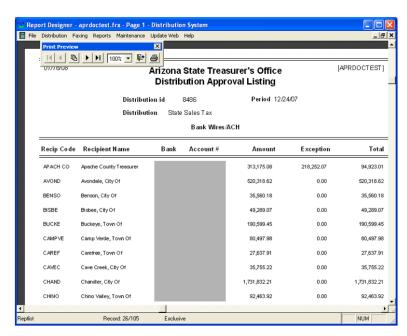


Used to generate Approval Report which is used to verify individual recipient amounts. Used to Approve Distribution, Release Distribution. Releasing the distribution created a wire/ACH Out Request. Releasing the distribution also creates entries into the LGIP

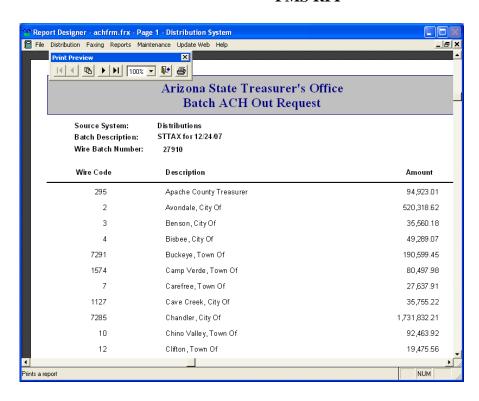
system as deposits into the recipients account if they have chosen to have their money distributed to their LGIP account instead of being wired to a bank account.



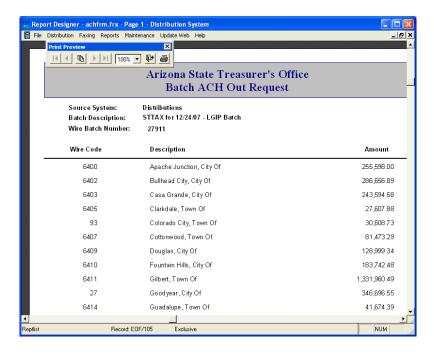
This is the 1st page of the Approval Report.



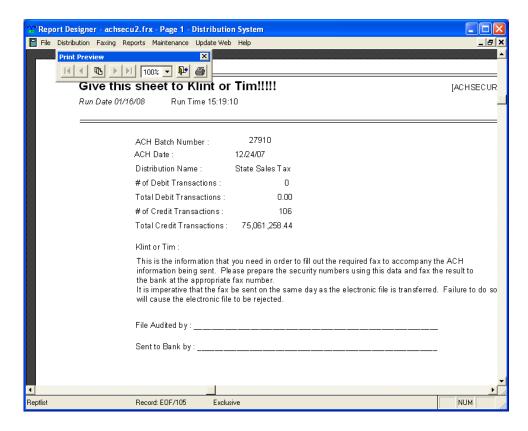
This is the 2nd page of the Approval Report.



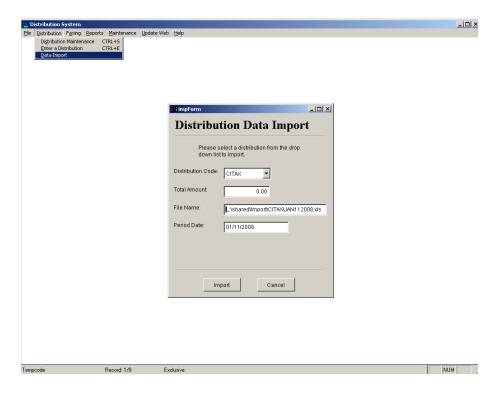
Release Report page showing ACH Out Request for recipients whose money is wired (or ACH) to bank accounts. Wire code is unique; it has specific banking information connected to it. It is used by banking department to send money through the banking system.



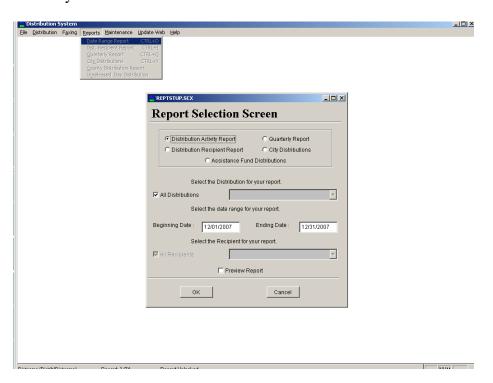
Release Report page showing reinvestments into LGIP accounts. Wire code is unique, it has specific banking information (could be LGIP account information) connected to it.



This page is generated when the distribution is being sent ACH. This is used to approve the electronic ACH file that was sent to the bank.

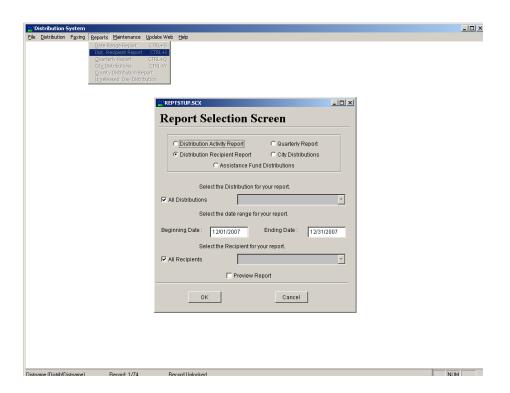


If agency distribution information can be imported, this is used to import by selecting a file that has previously been saved into a shared, import drive within the Treasurer's Office system.

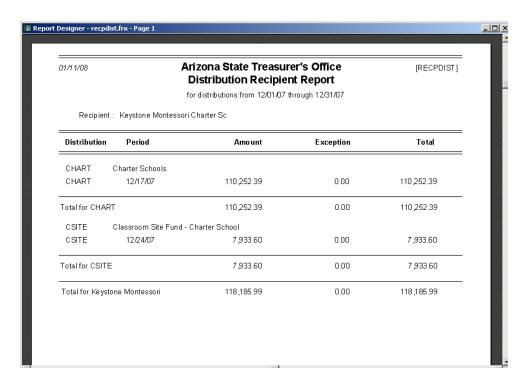


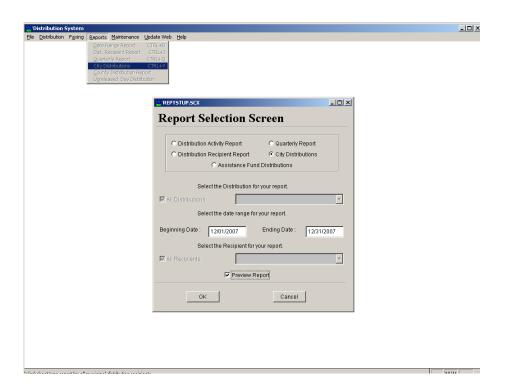
Generates report based on criteria selected. Could be distribution type for a specified time period, a specific distribution recipient or specific distribution type for a specified time period.



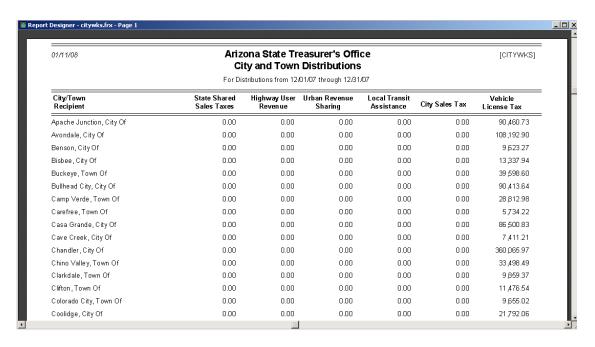


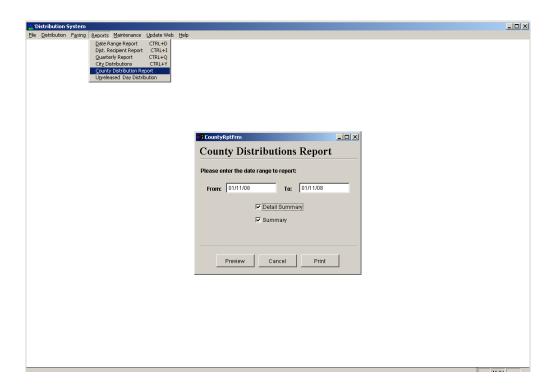
Generates report based on criteria selected. Could be distribution type for a specified time period, a specific distribution recipient or specific distribution type for a specified time period.



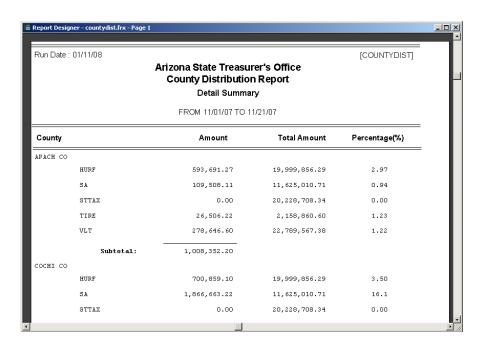


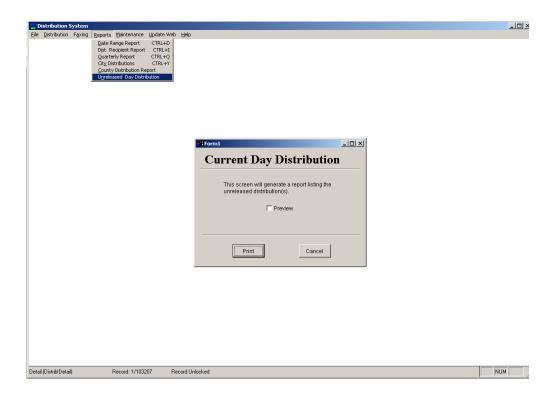
Generates report based on criteria selected only for cities and towns. Could be distribution type for a specified time period, a specific distribution recipient, or specific distribution type for a specified time period.

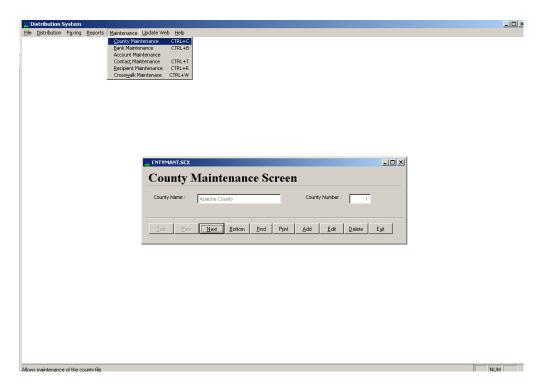




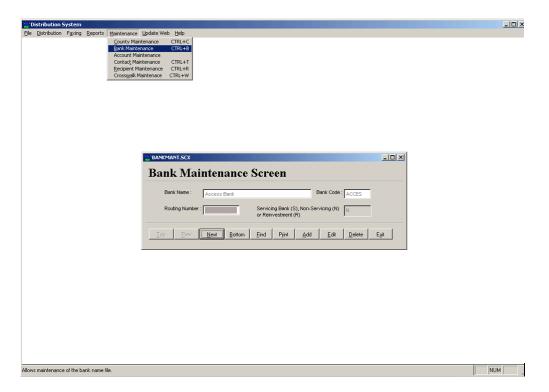
Generates report based on criteria selected only for counties. Summary information by county and distribution type.







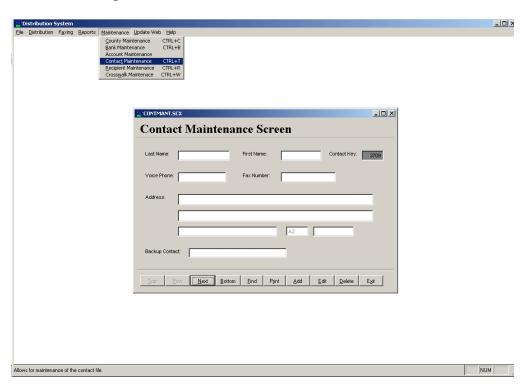
Maintain County information.



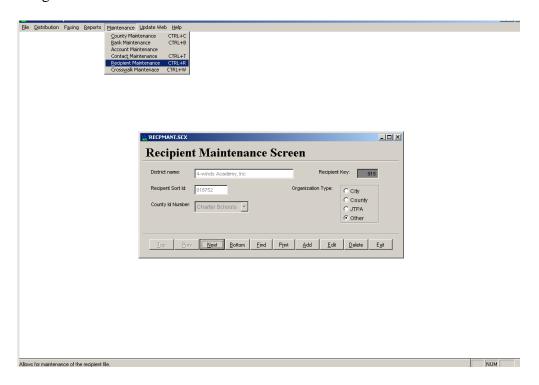
Maintain bank information; add new banks.



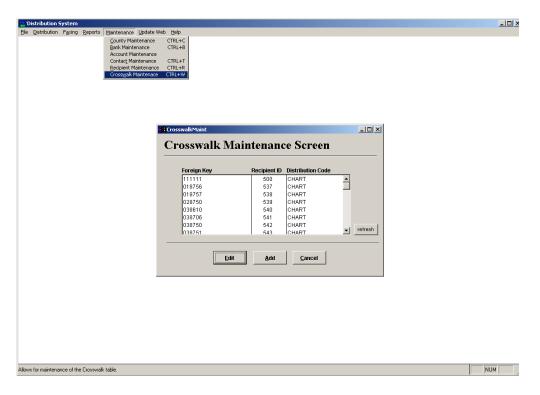
Adds a bank account, assigns the unique Account Key # (4digit); the Account Key number is the same as the Wire Code number that is on the Wire/ACH/LGIP Out pages of the Release Reports. The Account Key number must then be linked to the appropriate distribution recipient to be used when information is transmitted to bank.



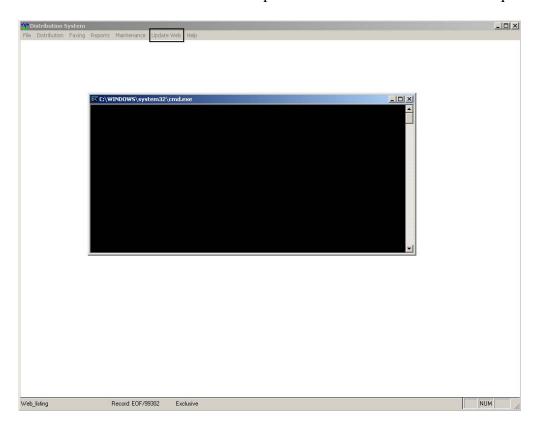
Maintain distribution recipient contact information. Each recipient has a contact that is used to fax distribution notices to. Contact id is a unique identifier that is system assigned.



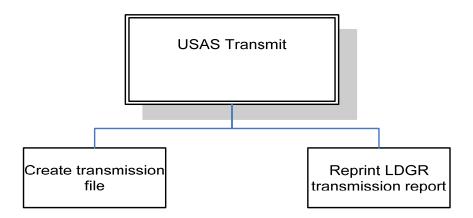
Maintain distribution recipients; add new recipients. Recipient Key is unique identifier that is assigned by the system.

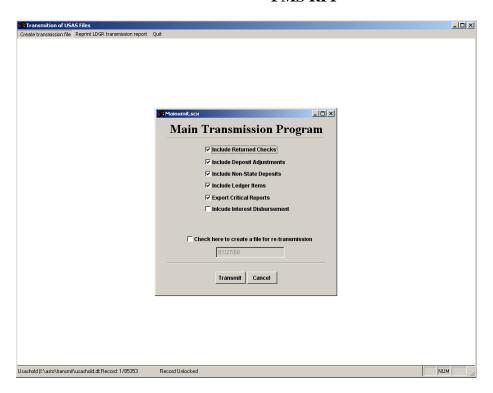


Matches a recipient id and charter school CTD#. CTD# is Dept of Education's unique identifier for each school and the Recipient ID is the Treasurer office's unique identifier.



Update web creates a new file that overwrites each night to update the searchable data base on the Treasurer offices' website. (Exports Excel file, which in turn updates an Access database, which is ftp'd)

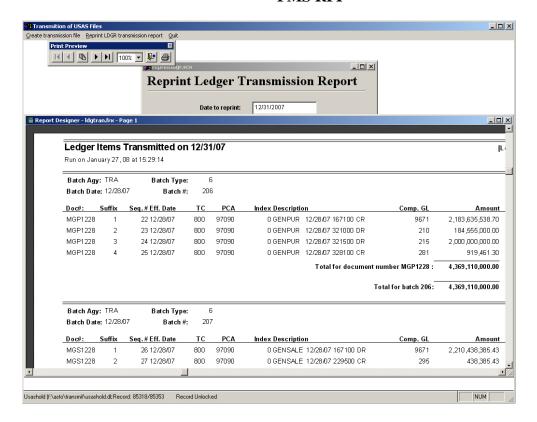


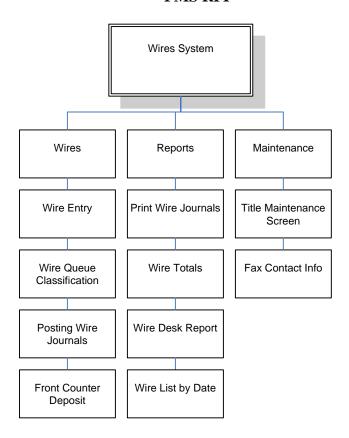


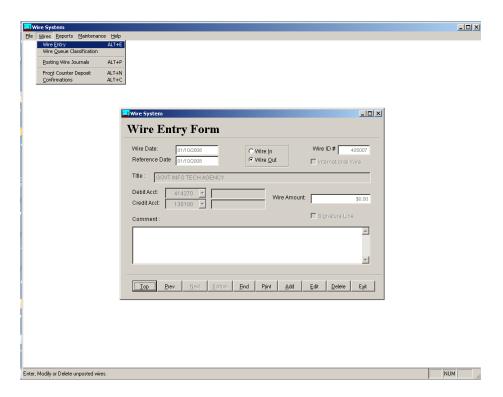
This system is used at the end of the day to transmit files to USAS.



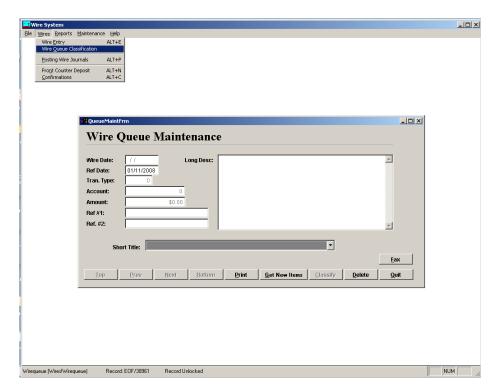
If it is necessary to reprint you must chose the "Reprint LDGR transmission Report.



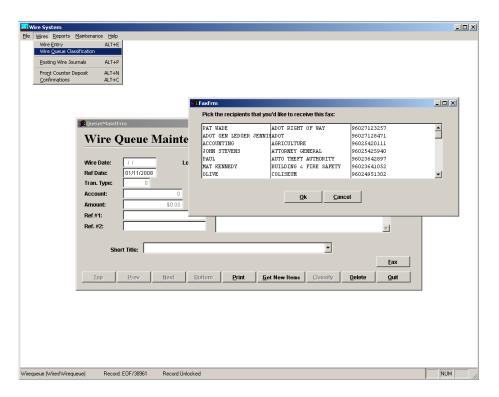




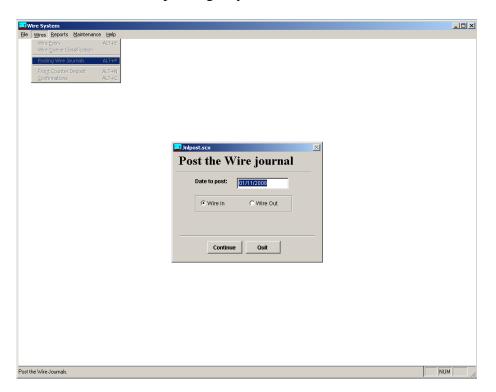
Manually add/delete wire transactions to the journal.



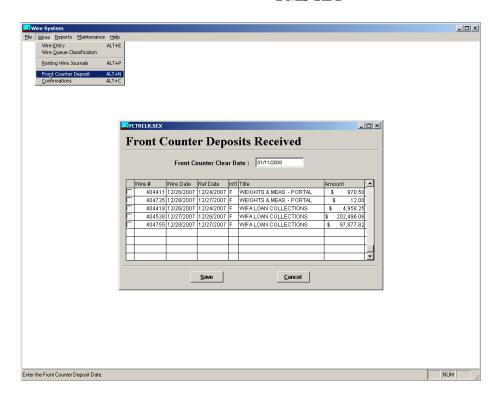
Loads incoming wire from servicing bank into a queue.



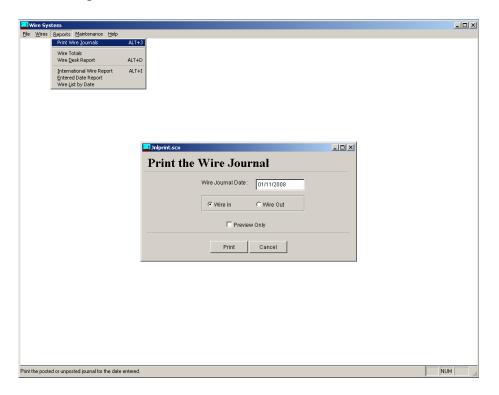
Fax notification to recipient agency.



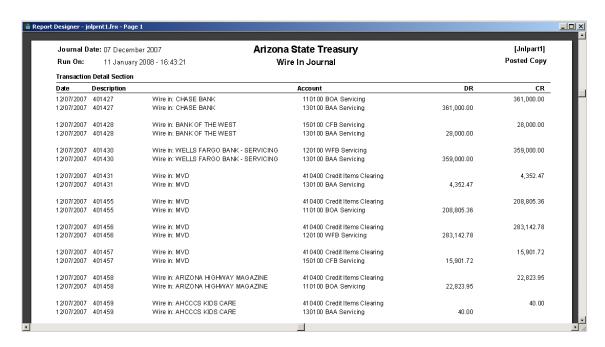
Post the wire journals to the general ledger.



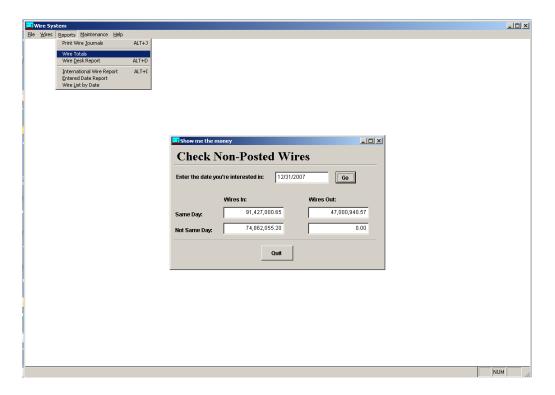
Shows what incoming wires are available from the main servicing bank for the front counter to process.



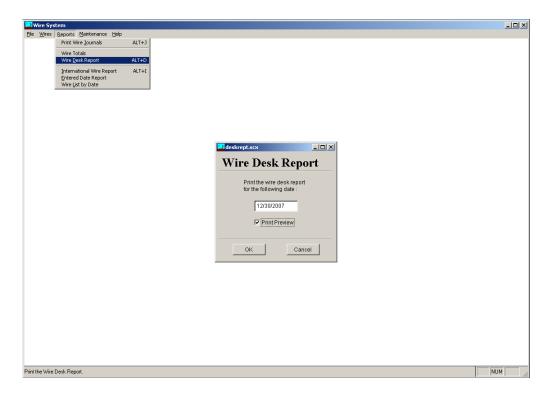
Print an unposted/posted version of the journals for verification.



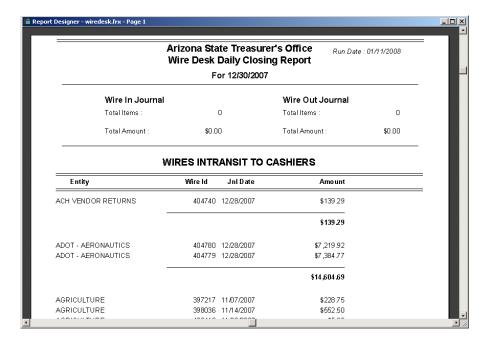
Print version of the above.



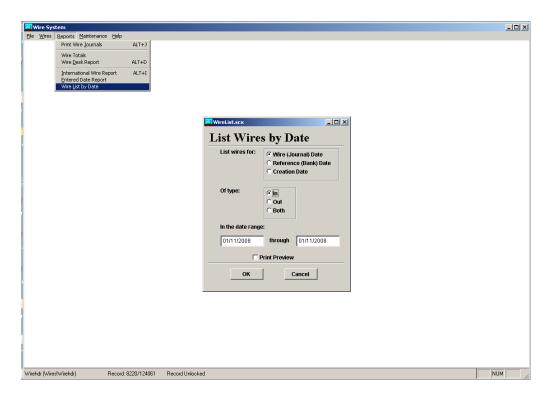
Report the wire in and wire out totals by date for cash flow purposes.



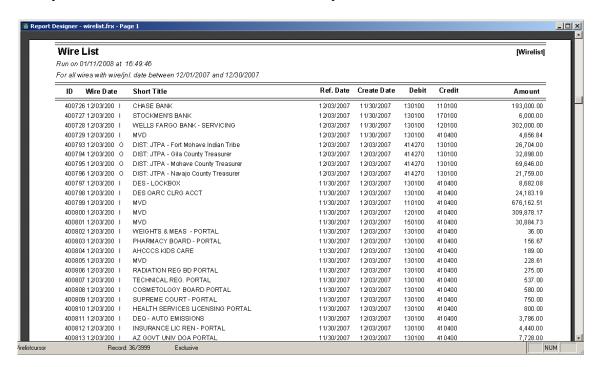
View all outstanding wire transactions by agency.



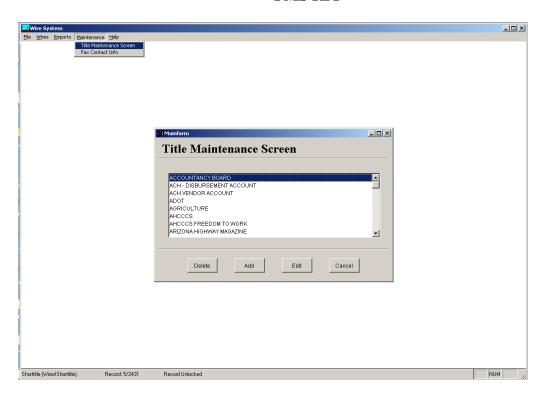
Print version of the above.



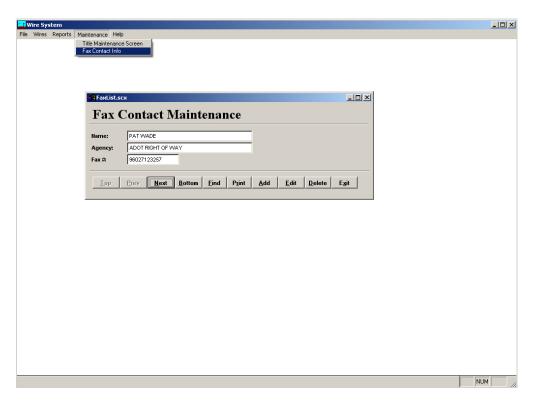
Verify outbound wires to the bank statement daily.



Print version of the above.



Maintain agency titles.



Maintain agencies fax information.

B. ASTO Functional Requirements Definition

1. Overview Diagram

1 FMS High Level Functional Requirements

The functional-requirements matrix details the business function capabilities the coreservices and related information technology (IT) applications solution (FMS) should provide. These requirements reflect directly upon the business needs of the Arizona State Treasurer's Office. The requirements are identified as belonging to one of the following categories:

- Mandatory (M): requirement that is determined to be mandatory and essential to ASTO's operations as part of the initial FMSR implementation
- Optional (O): requirement that is desired as part of the initial FMSR implementation, but is optional
- Future (F): requirement that is determined to be required at some point in the future (approximately one to two years from initial implementation).

To ensure that our selection is adjudicated by the merits of the proposed solutions, the following responses are required for each listed capability. Acceptable vendor responses are indicated in table 1:

Table 1.	Acc	entable	Vendor	Responses

Response	Definition
'Off-the-shelf'	Yes, Supplied functionality meets requirement 'off-the-shelf' without customizing.
Level of Customization Effort	Level of Customization Effort Required to meet requirement is $H = High,$ $M = Med,$ $L = Low.$
Third Party	Functionality requires a third-party partnering arrangement.
Future	Functionality is not currently available but will be available after the next 12 months.

FMS functional requirements are organized into the following areas:

- 1. Account Information: customer account information, including account number, balances, limits, exposures and pledged amounts.
- 2. Account Transactions: system transactions requirements.
- 3. Administration: back-office monitoring, reconciliation and related administration.
- 4. Cash Management: functions required to manage client cash positions and enable customer cash management.

- 5. Customer Information: all information relating to ASTO customers and their relationships with the ASTO.
- 6. General Ledger: general ledger, journal and accounting sub-systems posting and reporting requirements.
- 7. Interfaces: overview of interfaces required.
- 8. Reporting: daily operational reports, *ad hoc* and customized reporting capabilities.
- 9. Security: security requirements and system resource access controls.
- 10. Special Requirements: are unique to the Arizona State Treasurer's Office.
- 11. Transactions and Processing.
- 12. Financial tracking and performance monitoring.

2 FMS Functional Requirements Matrix

Requirement Category	Requirement Number	Functional Requirement	Requirement Description	'Off-the-shelf'	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
M	1	Account information					
	1.1	Customize Account Rules	Flexibility to support account rules on an account level and account-type.				
	1.2	Flag Account Status	Reduction or elimination of account flag process (by providing real-time status attributes via a user-friendly menu).				
	1.3	Attribute Accounts	Associate a flexible list of mandatory information with account number (e.g., customer ID).				
	1.4	Build Account Relationships	Link accounts for balance transfer and total balance aggregation.				
	1.5	Consistent Account Balances	Consistent display of account balances across multiple users-access channels (phone, paper statements, Internet). Account balance updates real-time across all channels that makeup the customer relationship.				
	1.6	Control and Security	Associate account creation, access and activity with flexible security permission scheme. Force resetting of passwords at predetermined periods. Assign unique passwords to individual users.				
	1.7	Inquire Customer Status	Flexibility for grouping and analyzing accounts according to status.				
	1.8	Support Standing Orders	Standing orders established/monitored on a date-basis.				
	1.9	Flexible Accounts	Ability of the core-system to recognize and/or post non-core positions (e.g., investments, treasury products).				
	1.10	Set Flexible Limits	Hierarchical structure for account limit setting (e.g., by client, account type, product, branch, business unit, etc.).				

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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	Off-the-shelf	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
	1.11	Online Search	Dynamic online searches for customer records, account number, name searches, agency searches, telephone number, etc. (support for all fields).				
	1.12	Recurring Transactions	Associate transactions with periodic intervals or set times.				
	1.13	Sub-Accounts	Store reference name subs-same customer name, but different sub-accounts.				
	1.14	Transaction Historian	Analyze and report performance and historical transaction information by time period or account type.				
M	2	Account transactions					
	2.1	Open Accounts	Capture name, address, statement frequency, notes.				
	2.2	Handle Split Transactions	Accept deposit transaction and split credit to multiple accounts. And, ability to handle single-deposit transaction with multiple "split" value dates.				
	2.3	Select Account Numbers	Customize account number.				
	2.4	Close Accounts	Flag accounts as closed without deletion from system database.				
	2.5	Maintain Accounts	Perform maintenance (non-financial) or non-banking "static" transactions without creating journal entries.				
	2.6	Open Accounts	Straightforward account opening including user defined number generation.				
	2.7	Transfer Accounts	Accommodate transfer of funds between accounts.				
	2.8	Automated Settlement and Clearing	Automated matching of all inter- and intra-bank journal entries according to dual-entry accounting standards.				
	2.9	Back Date Value	Validate back value-date and ensure that it is a correct date with rules.				

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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	Off-the-shelf	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
	2.10	Balance Reporting	Consistent, real-time balance requests				
			from any point-of-contact, as well as improved exception reporting/trial balance				
			for internal reconciliation between				
	2.11	Cash Deposits	Handle deposit of cash monies.				
		*	_				
	2.12	Deposits and Withdrawals	Support deposits and withdrawals, and real-time account balances between.				
	2.13	Dormancy Rules	Set rules for account dormancy				
	2.13	Dormancy Rules	(manually). Manually set rules for account				
			dormant or restrict action if rules are not				
			met.				
	2.14	Fund Transfer	Generate fund transfers with proper				
			formatting.				
	2.15	Online Reports	Review reports online and print on				
			demand. Reports should be available for				
	0.16	Post	seven years.				
	2.16		Posting for each individual item.				
	2.17	Reactivate Dormant Accounts	Set rules for reactivating dormant accounts. Rules should be set to ensure				
		Accounts	that accounts are reactivated only through				
			manual process and with supervisory				
			approval.				
	2.18	Post Transactions to	All transactions should be validated and				
		FMS Real-Time	posted online, in real-time, to the				
			appropriate journal.				
	2.19	Report Supervisor	Production of exception reports with				
		Exceptions	legible and meaningful reasons for the				
	2.20	NCE Chapter	acceptance of the exception.				
	2.20	NSF Checks	Handle all transactions associated with NSF checks.				
	2.21	Transaction Defaults	Default transaction fields and parameters				
	2.21	Transaction Details	based on transaction type. The ability to				
			flexibly define the default position and				
			information available per transaction type.				
	2.22	Transaction	Create, amend, delete, update transaction				
		Definitions	header and create live parameter file.				

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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	Off-the-shelf	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
	2.23	Transfer and Exchanges	Transfer balances between linked accounts.				
M	3	Administration	decounts.				
	3.1	Amend Accounts	Modify account details after account has been set, subject to dual control, as necessary. Both front- and back-office areas can do this.				
	3.2	Maintain Error Message File	Create, amend and delete a message.				
	3.3	Maintain Help Text	Create, amend and delete text record.				
	3.4	Implementation of Limits	Flexible application of limits/accounts/group of accounts/sub-accounts.				
	3.5	Monitor Accounts	Monitor selected accounts according to risk or other parameters.				
	3.6	Security Mechanism for Log-In and Log-Out	Hierarchy of security for user IDs and access to online and offline system capabilities.				
M	4	Cash Management					
	4.1	Customer Support	Online access for the customer to view their accounts.				
	4.2	Execute Transactions	Client-activated or relationship-manageractivated.				
	4.3	Flexible Reporting	Client-initiated and relationship-manager-initiated.				
	4.4	Industry-Standard Accounting Packages	Flexibility to conform to evolving local and international standards, as well as client-run applications via XML.				
	4.5	Monitoring/Tracking	Client and relationship manager perspective on cash balances, investments, performance, etc.				
	4.6	Security/Logging/ Audit Trail	Identification, archival and retrieval of all transaction and other system-input records.				

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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	Off-the-shelf.	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
M	5	Customer Information					
	5.1	Aggregate Relationships	View 360-degree relationship with ASTO's customer across the entire customer position and/or transaction history, including all customers in relationship, accounts, products, aggregate balances and limits.				
	5.2	Custom Aggregate Balances	View account balances across all accounts, available funds and pledged/earmarked funds.				
	5.3	Classify Customer	Segment and aggregate all information by customer type, balances, date range, type of account, type of customer, type of transaction, etc.				
	5.4	Customer Relationship	Link and identify related customer accounts and sub-accounts. Must be able to provide link to oversight agency as well as account owner.				
	5.5	Enhanced Query Capabilities	Flexible ability to search for and identify client information by any account parameter.				
	5.6	Flexible Account Numbers	Assign "easy number" (user defined – alpha/numeric) in such a way as not to compromise security, and to ensure that account numbers are not reused.				
	5.7	Integrator with Auto- Dialer	Customer information records should interface with auto-dialer facilities. This is a potential future requirement for ASTO.				
	5.8	Rules-Based Relationships	Associate flexible business rules with client relationships (e.g., customer preferences, limits and ticklers).				
	5.9	Contact Lists	Produce customer lists (name, address, customer list, etc.) to direct-mailing system, with ability to generate proactive prompts for interactions.				

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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	Off-the-shelf	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
	5.10	Notes/Comments/ Requirements	Ability to incorporate free-form text notices to client records, with expiry capability.				
	5.11	Relationship/Contact History	Integration of historical interactions with client records (correspondence, complaints, past transaction, contact annotations, "moments of truth").				
	5.12	Call/Contact Tracking	Ability to identify and report on historical activities for certain clients and client groups.				
M	6	General Ledger					
	6.1	Accounting Standards	Flexible control over chart of accounts and journal process to conform to GASB and FASB regulations and rules for Ownership Accounting.				
	6.2	Archival Capability	Support online access to fully relational historical transaction data for past 36 months, plus 48 additional months offline.				
	6.3	Asset/Liability Manager	Should support daily asset and liability reporting.				
	6.4	Automated Account Generator	Auto generate accounts required to support transactions according to modifiable business rules.				
	6.5	Automatic Posting	Auto posting with rules from other core systems and deposit processing.				
	6.6	Reconciliation	The G/L system must provide an autoreconciliation function for the sub-ledgers related to a parent ledger.				
	6.7	Average Balances	Calculate account balances according to flexible parameters (monthly or daily balances).				
	6.8	Batch and Online Transaction Capability	Perform both Batch and Online transactions as deemed necessary.				
	6.9	General Journal	Correct any transaction detail of associated journal entries.				

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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	Off-the-shelf	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
	6.10	Daily Closing	End-of-day reconciliation should provide trial balance, suspense accounting and sign-off capabilities.				
	6.11	Date Capability	Back-date transactions.				
	6.12	Export Data	Export G/L information into Excel spreadsheet, etc.				
	6.13	Historical Analysis	Back-test risk models, product development analysis, etc.				
	6.14	Journal Inquiry	To display totals, print, scan and print journal.				
	6.15	Management Reporting	Flexible reporting capability for stakeholders; modifications should be in purview of DBA, not code developers. Must be compatible with BI applications.				
	6.16	Reference Number	Use traceable reference numbers on transactions sent to G/L in batch.				
	6.17	Non-Update Mode	View changes and entries in a non-update "what-if" mode (i.e. interest postings).				
	6.18	Online Correction	Perform real-time corrections of posted transactions in individual journals with rules.				
	6.19	Open Transaction Ledger	Open transaction ledgers for more than a day without affecting transaction entries for subsequent days.				
	6.20	Point-In-Time Recovery	Back up transaction log and G/L balance to any desired point in time, to recover from corruption of either G/L or transaction history data.				
	6.21	Regulatory Reporting	Automatically generate required external reports.				
	6.22	Sub-Ledger	Tightly coupled ledgers such that a change to a sub-ledger automatically updates its parent ledger(s).				
M	7	Interfaces					
	7.1	Download Data	Download and upload information to and from the Arizona Department of Administration USAS.				

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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	Off-the-shelf	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
M	8	Reporting					
	8.1	Ad Hoc Capabilities	Flexible report abilities supportable as much as possible by non-technologists, spanning customer and account information across the entire ASTO.				
	8.2	Consolidated Statements	Support consolidated account statements that reflect all accounts held, regardless of type (total customer position); set delivery period.				
	8.3	Customer Statements	Provide customer statements on demand, and the ability to view individual deposit and withdrawal transactions in multiple formats.				
	8.4	Customized Reports	Scope and frequency of reports should be established by each group that requires the data, with parameters being set by other responsible groups, e.g., FCD for accounting rules or RAD for risk rules.				
	8.5	Forecasting	Perform "what-if" type of forecasting based on parameter-driven approach.				
	8.6	MIS, EIS Reports	Define, generate online and archive management reporting.				
	8.7	Reconciliation	Automated generation of reconciliation between General Ledger and bank info with highlighted breaks and fails, potentially with intelligent capabilities for streamlining correction accounting.				
	8.8	Supervisor Review and Editing	Ability to refer all necessary elements of select transactions to supervisor or original maker for review and potential editing, with ability to enforce multi-level authorization control in this context.				
	8.9	Transaction Narrative	Ability to select from a list of transaction narratives to describe transaction, or by using free-form text.				
M	9	Security					
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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	Off-the-shelf	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
	9.1	Assign Security	Assign/modify security access to individuals based on role and profile (template).				
	9.2	Physical Device and Location Audit	Report and audit specific location where transaction occurred.				
	9.3	Auto Log-Off	Forced time-out based on time parameters. Time-out parameters should be flexible, based on job role and function.				
	9.4	Blocking Certain Types of Passwords	Blocking use of certain passwords, such as easily guessed passwords, passwords based on the user ID, and passwords containing words from a dictionary.				
	9.5	Data Encrypting	Encrypt passwords and customer-sensitive data based on industry-standard encryption mechanisms.				
	9.6	Security Access	Deletion of security access and removal of access privileges in-real-time.				
	9.7	Exception and Violation Reporting	Automatically generate exception reports for security violations (e.g., exceeding maximum number of password entries).				
	9.8	Flexible Security Administration	Easy administration of security (establishing profiles and audit capabilities) by authorized personnel. Perform this function from a central location.				
	9.9	Flexible Security Reporting	Perform user profile reporting easily, using flexible reporting mechanism.				
	9.10	Forced Token in Password	Force use of a token and password for high-risk applications/transactions, such as security administration and funds transfers over a set minimum figure.				
	9.11	LDAP	Support for LDAP security infrastructure. This includes single sign-on from user's workstation.				

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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	Off-the-shelf	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
	9.12	Modify Security	Modify an individual's security access by assigning them a new role. Modification to security access should be straightforward, based on selection of certain functions or transactions.				
	9.13	Password Expiration	Automatic expiration of user passwords.				
	9.14	Password Length	Support specified minimum password length.				
	9.15	Profile- (Template-) Based Security Administrator	Granting security access using role-based templates. Individual access is based on functions and transactions allowed within role.				
	9.16	Repeated Use of Password	Enforce input of additional or repeated password on certain high-risk transactions to ensure the user has not left the terminal unattended.				
	9.17	Required Alphanumeric Characters in Password	Enforce use of alpha and numeric characters in password.				
	9.18	Restrict Access by Account Type	Restrict access to certain accounts or account groupings. Restricted access should be at transaction level.				
	9.19	Access Revocation	Blocking the ID after three failed attempts.				
	9.20	Security Audit Trail	Generate robust security audit reports describing who, what, when and where security was assigned, modified or deleted.				
	9.21	Security Authorization	Support of authorization workflow for secondary approval of security access or modifications.				
	9.22	Link Security to Physical Device	Restrict access to system and system's functions based on physical location of terminal.				

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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	'Off-the-shelf'	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
	9.23	Session Manager	Ability to restrict single/multiple session(s) per user, e.g., user should only be allowed to be logged on at one workstation at a time.				
	9.24	Report Unusual Activity	Generate exception reports on a criteria- based method, to detect unusual frequency of transactions just within limit, etc.				
	9.25	Validate User	Ensure that operator is recorded as the user who is entering the transaction. This should handle cases when original operator steps away from terminal, but has not logged off.				
M	10	Special Requirements					
	10.1	Peak Volumes	Handle peak volumes of approximately 100,000 transactions in a day.				
	10.2	Tickler File	Ability to allow for information to be passed from one area of responsibility to another area of responsibility.				
	10.3	User Access	Handle 20 (scalable to 25) internal concurrent users and administrators, 200 concurrent external users (via web access) with future scalability.				
M	11	Transactions	·				
	11.1	Reverse Transactions	Process transaction reversals.				
O	12	Financing Reporting					
	12.1	Budget	Ability to budget at department level.				
	12.2	Cost center tree- structure	Ability to move cost centers within a "tree" structure. Ability to move accounts/cost centers within "tree".				
	12.3	Scenario developer	Ability to create scenarios based on different assumptions.				
	12.4	Base and new business reporting	Ability to budget at line of business department levels and customer.				

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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	Off-the-shelf	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
	12.5	Budget unit drill- down	Ability to breakdown what the budget number is made up of (line item schedules).				
	12.6	Budget tracker	Ability to track the budget process by user.				
	12.7	Ad hoc reporting	Ability to customize reports, Ability to create graphs, Ability to file and retrieve reports electronically.				
	12.8	Budget timeframe drill-down	Ability to budget either by month, quarter, or year.				
	12.9	Ad hoc rollup	Ability to have alternate rollups.				
	12.10	Multiple funding source capability	Ability to have more than one budget source file per year in General Ledger.				
	12.11	Budget version (What ifs)	Ability to create more than one budget versions at a time.				
	12.12	Formula and method (What ifs)	Ability to change formulas and methods.				
	12.13	Intra-year what ifs	Ability to create budgets based on year to date actuals, prior budgets, current budgets, year to date averages, or combination thereof.				
	12.15	Unit spread algorithms	Be able to spread information by a variety of ways – evenly, by account, by statistic, by account from last year.				
	12.16	Personnel spreads	Ability to budget personnel by individual information (including fringes, taxes, raises).				
	12.17	Historical look-back	Ability to have history at least five years back.				
	12.18	Look-forward	Budget at least five years out.				
	12.19	Project analysis	Be able to create cash flows based on Capital Projects for at least a 5-yr time frame.				
	12.20	Self-contained reporting	Generate cash flow report without use of additional software.				

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Requirement Category	Requirement Number	Functional Requirement	Requirement Description	Off-the-shelf	Level of Customization Effort Required is H = High, M = Med, L = Low	Third Party	Future
	12.21	Export functionality	Ability to export information out as different file extensions or save as different file extensions.				
	12.22	Multiple functional roles	Ability to have "users" access their budgets to create, adjust, or review them General Ledger.				
	12.23	Allocations	Be able to perform allocations.				
	12.24	GL import/export	Ability to import/export data to/from general ledger.				
	12.25	MS Word interface	Ability to paste reports directly to Word documents or other software.				
	12.26	MS Excel interface	Ability to export inquiry results directly to spreadsheet.				
	12.27	GL-source document drill-down	Ability to "drill down" to source documents and from source documents to G/L.				
	12.28	Investment tracking	Investment tracking.				
	12.29	Interest tracking	Interest accrual.				
	12.30	Cash position forecast	Cash forecasting.				
	12.31	Chart of accounts	Ability to have chart of accounts linked to budget software.				
	12.32	Balance sheet	Must be able to produce schedules for balance Sheet requirements.				
	12.33	Statements	Must be able to produce monthly and annual financial statements.				